THE URBAN AGE

Volume three

Number two

June 1995

17447

Public Disclosure Authorized

Public Disclosure Authorized

THE HUMAN ENVIRONMENT OF CITIES

Bombay: One City—Two Worlds

If [Bombay] is for many people, including the poorest, a place of endeavour, activity, chances, succour, a place to seek your fortune and even find it. Battered, dirty, over-crowded and choked with exhaust fumes it may be, but it is also a city of dreams.

Gillian Tindall, *City of Gold*

BOMBAY. International flights to Bombay arrive after midnight, when the dust and turmoil of the city's streets have settled for the night. The trip to South Bombay from Sahar International Airport winds through the slums of Dharavi, Mahim, and Parel, where shacks cobbled together from cardboard, tin, and cloth hug the streets. People, lined up in rows, sleep out on the pavements, on the tops of bridge rails, sometimes on mattresses pulled out to the side of the street, other times on the bare ground. It is said that when the American writer Mark Twain visited Bombay in 1890, his first impression was of the people sleeping out on the pavements in the middle of the night.

As long as a hundred years ago, Bombay's bustling economy drew thousands of rural migrants into the city. Then, as now, the supply of jobs was greater than the city's capacity to house its residents. Today an estimated 300 newcomers a day continue to stream into the metropolitan area, and more than 50 percent of its inhabitants live in slums.

What is happening in Bombay is not unique, particularly in the developing world. The pull of the rural poor to growing urban areas is occuring in the rapidly developing economies of China, Indonesia, Egypt, and elsewhere. Migrants come for jobs, and they move where they can be near to those jobs, despite often unbearable living conditions. In Bombay it is estimated that at least one child per day is killed by trains running through squatter settlements that crop up as close as ten feet from the railroad tracks. Families settle near the tracks because it is open, available land and because it puts them near to transportation. Among their biggest fears is who will keep their children from wandering onto the tracks while they are away from home.

The problem of slums and inadequate housing in Bombay is compounded by physical contraints and a series of long-standing land-use and housing policies that have failed to stem the tide of urban congestion. Economic liberalization and financial growth have outpaced the city's ability to house and provide services for its citizens. A look at some of the policies regulating the housing market gives a glimpse of how the city is dealing with its vast housing needs.

Can we "decongest" the city?

Demographically, Bombay has one of the highest population densities of any city in the world—about 160,000 people per square mile. Originally a group of seven islands first settled by the Portuguese, land reclamations have created a peninsular city where land supply is limited and development has followed a north-south pattern along the railroad lines (see map, p. 5).

To understand the current policies regulating housing and commercial development in Bombay, one has to look at the history of planning in the city. The theme behind most planning attempts has been to "decongest" the urban core of the city, which is centered at the southernmost tip of the peninsula. It is here that government offices are located, and that the business and financial sectors are found. The city was first developed from this southern tip, where the port attracted commerce from around the world. Even today the Port Authority of Bombay is the major landlord in South Bombay.

continued on page 4 ▶

IN THIS ISSUE

1 Bombay: One City—Two Worlds by *Mary McNeil*

6 Urban Development Progran in Calcutta Integrates Environmental Concerns by *Kalyan Biswas*

8 The Changing Face of Shang by *Edward Leman*

9 Quality Water for Shanghai by *Mike Burley*

11 Metropolitan Development i Asia by *Ephim Shluger*

12 Tokyo: A Life in Transition by *Hideaki Hoshina*

13 Nairobi: Slum Upgrading in Mathare by *Wachira Kigothc*

20 Notebook: Tbilisi—The Fall and Rise of a Caucasus City by *Simon Sebag Montefiore*

21 Improving Urban Environme tal Performance: The Examp of London by *Herbert Girar*

DEPARTMENTS

2 **Letters to the Editor**

3 **World View** The Human Fa of the Urban Environment by *Ismail Serageldin*

14 **Newsline** Housing Finance Forum

15 **Urban Lifestyle** Feng Shui: The Strength of Tradition by *Lisa Solomon*

16 **Architectural Commentary** Berlin: The Rebuilding of a (by *Jonathan Foreman*

17 **Featured Columnist** Harness Creativity in Sustainable Urb Development by *Charles La*

18 **Best Practices** Chattanooga: Moving Toward Sustainabili by *Margaret Bergen*

22 **Bulletin Board** The Challen of Habitat II by *Michael Coh*

24 **Mayor's Column** The First Inter-American Conference (Mayors by *Tim Campbell*

25 **From the City Manager's I**

26 **Books**

27 **The Urban Calendar**

Danida
MINISTRY OF FOREIGN AFFAIRS
Federation of Canadian Municipalities
Fédération canadienne des municipalités
Fannie Mae Office of Housing Research
Urban Management Programme

This issue of *The Urban Age* is funded by the Danish Agency for International Development, the Federation of Canadian Municipalities (Canadian International Development Agency), the Fannie Mae Office of Housing Research, the Dutch Ministry of Foreign Affairs, and the World Bank. Developmental funding has been provided by the UNDP-UNCHS(Habitat)-World Bank Urban Management Programme and the World Bank.

EDITORIAL BOARD

Jeb Brugmann
ICLEI, Toronto, Canada
James H. Carr
Office of Housing Research
Fannie Mae, Washington, D.C., USA
G. Shabbir Cheema
UNDP, New York, USA
Charles Correa
Bombay, India
Zsuzsa Daniel
Research Institute
Ministry of Finance
Budapest, Hungary
Mamadou Diop
Dakar Metropolitan Community
Dakar, Senegal
Nigel Harris
Development Planning Unit
University College
London, England
Th. H. Kolstee
Dutch Ministry of Foreign Affairs
The Hague, The Netherlands
Aprodicio Laquian
UBC Centre for Human Settlements
Vancouver, Canada
Jaime Lerner
Curitiba, Brazil
Akin Mabogunje
Ibadan, Nigeria
Pablo Trivelli
Urban Management Programme
Quito, Ecuador
Jaime Valenzuela
IULA/CELCADEL, Quito, Ecuador

EXECUTIVE COMMITTEE

Arif Hasan
Karachi, Pakistan
Hilda Herzer
Centro Estudios Sociales y Ambientales
Buenos Aires, Argentina
Peter Swan
UNCHS, Nairobi, Kenya

EDITORIAL STAFF

Editor Mary McNeil
Associate Editor Margaret Bergen
Production Michelle Lynch Zook
Distribution Consuelo Powell

LETTERS TO THE EDITOR

We welcome your comments, thoughts, and suggestions on The Urban Age.

Editor:
I have been a regular reader of the Urban Age for the last two years. As a graduate with a specialisation in the physical planning of settlements from the School of Planning and Architecture, New Delhi, the journal has been very stimulating in keeping me abreast of the latests trends, best practices, and current changes in the developing and developed urban world. The issue on Privatization and Cities was quite thought provoking and appropriate for our times, as city adminsitrators are beginning to encourage private sector investments in the fields of transportation and infrastructure.

Gagan Dhir
Town Planner
School of Planning and Architecture
New Delhi
India

Editor:
I am writing to you about a subject you may find of interest for a future issue of the Urban Age. This is the need to redesign present land use planning instruments to make them more effective for the management of developing cities. While zoning building codes are justly criticized for their uneven effectiveness, they are the only planning instruments that most developing cities have available to plan their growth and locate new investments. In order be effective in supporting urban development, zoning and land use plans must be flexible and adapt to varied and changing economic and environmental contexts. They should also be based on careful analyses of the economic and ecological processes occurring in different sectors of the city.

Jaime Valenzue
Project Direct
International Union of Loc
Authorities IULA a
Local Government Development and Traini
Center CELCADI
Quito, Ecuad

continued on page 28

Editor's Note

In this issue we revisit a theme covered in our first issue of *The Urban Age*—the urban environment. Yet rather than concentrating on the technical side of environmental improvements, in this issue we look at the *human* side of the environmental dilemma. As the number of people living in the world's cities and towns grows, environmental concerns such as adequate housing and sanitation, clean air to breathe, and access to potable water are increasingly *people* concerns. Similarly, the amount of environmental resources being used by urban residents is reaching alarming proportions. It seems fair to ask, "Are the cities of the world sustainable?" If so, how are resources to be managed at a time when population growth and urban sprawl are putting more and more stress on city managers?

We are fortunate in this issue to be able to look at two of the most dynamic cities in the developing world—Bombay and Shanghai. In each, liberalization has been accompanied by tremendous economic growth. As people stream into these cities in search of jobs, obvious questions arise. How will they be housed? Is there enough water to sustain the population? How do we dispose of wastes? In Bombay, more than 50 percent of the population live in slums, often without secure land tenure or access to basic services. In Shanghai, the Huangpu River is so polluted that it appears black and smells during parts of the day. Both cities are now grappling with how to couple economic success with improvements in the day-to-day living conditions of their residents.

We have tried to broaden our coverage to include those intangible aspects of urban life that are not based solely on physical attributes. Charles Correa, a member of our editorial board who provided invaluable assistance during our visit to Bombay, refers to this as a "great city—terrible place." We have followed up this theme by including articles by Charles Landry, who writes of the need for the "creative city." Jonathan Foreman writes of the architectural renewal of Berlin, Germany, and Simon Sebag Montefiore gives us a glimpse of the spirit behind the rebuilding of Tbilisi, Georgia, where four years of civil war have failed to dampen residents' optimism for the future.

As we pass the mid-way point between the United Nations Conference on Environment and Development (June 1992), and the upcoming Habitat II conference, or City Summit, to be held in Istanbul, Turkey (June 1996), we are struck by the similarities between environmental and urban issues. Herbert Girardet reminds us that "the quest for sustainable development is also a quest for sustainable settlements." By launching a "bulletin board" on Habitat II, we hope to bring further attention to these similarities, and to open the dialogue among economists, planners, architects, politicians, engineers and others who have a stake in the future of our world's cities.

Finally, as Ismail Serageldin writes in his guest editorial, "The world has come to understand that global and local, national and regional, rural and urban ecosystems and environmental conditions are all connected." The concerns of the urban environment are therefore the concerns of us all. As such, we hope you find this issue of interest, and look forward to receiving your thoughts and criticisms.

—Mary McNeil

The Human Face of the Urban Environment

Ismail Serageldin is vice president for Environmentally Sustainable Development at the World Bank.

There is little doubt that a rapidly growing share of the world's population is living in urban areas. In the developing countries, there will be an increase of some 2.4 billion people, or one million people a week, living in urban areas for the next thirty years. At the same time, these urban areas now account for more than half of the GDP in most developing countries.

Urban areas are thus both consumers and producers, and have become the engines of economic development. And yet they also contribute to the pollution of the natural environment. As spatial and physical environments, cities have their own special problems that have produced new environmental phenomena and behavior: mountains of solid waste, rivers that burn, and air quality that can lead to brain damage and loss of human intelligence.

We have also learned that these problems have disproportionately large impacts on the urban poor. Housing policies that force the poor into unserved squatter settlements keep people poor by denying them the opportunities to use their scarce incomes to improve their physical environment. The result is that only 40 percent of urban dwellings in developing countries are connected to sewers. Inadequate water supply forces the poor to pay higher prices for water, often 10 to 15 times what middle-income households pay per liter of potable water. A lack of effective sanitation and waste disposal pollutes shallow aquifers, which other poor residents use as water resources. Middle and upper-income groups are able to afford solutions to these problems; the poor are faced with these additional burdens. If the Rio Earth Summit of 1992 helped to raise awareness of global environmental problems, two years later the call for environmental justice is heard everywhere, from Nairobi to the South Bronx, from Ahmedabad to Guadalajara.

Let me try to identify the critical features of the human face of the urban environment and to pose the broad questions that must be faced.

Why is the challenge of the urban environment a human problem? Because the manner in which people have organized themselves, increasingly concentrated in urban areas of all sizes, has important consequences for environmental resources. As increasing shares of national populations are found in urban areas, their consumption patterns become more significant.

When we speak of the vulnerability of urban areas to environmental disasters, it is not because Latin American cities receive higher rainfall than the countryside and thus are susceptible to flooding. It is rather that concentrations of people in urban areas may have constructed infrastructure to manage run-off that cannot be maintained, thus leading to flooding of the banks of drainage canals. This so-called "natural disaster," therefore, may be "natural" only in the sense that it is a commonly understood part of the human experience.

Are cities sustainable? The question itself must be broken down. First, are cities living within reasonable resource limits? We know, for example, that there are cities and towns in China and India consuming dangerously unsustainable quantities of natural resources. The question is not whether cities are sustainable but rather "What needs to be done to improve their sustainablity?" We must look at examples of best practice from around the world to learn what policies and approaches have allowed some cities to be successful in managing environmental resources. Where have cities managed to change the existing patterns of resource consumption?

"The world has come to understand that global and local, national and regional, rural and urban ecosystems and environmental conditions are all connected; that all of us are downwind and upstream from one another. The urban environmental agenda used to be considered largely a set of local problems. Today, the world community is consumed with revisiting and renegotiating the human agendas. Increasingly, these agendas require critical attention to the human and environmental conditions in cities and towns of all sizes, and poverty, urban poverty, is inextricably part of the problem..."

The Human Face of the Urban Environment:
A Report to the Development Community
by Ismail Serageldin and Michael Cohen, Editors

What about the future of cities? In the case of the biggest urban areas—the megacities—have they reached their environmental limits? Do market forces inevitably result in excessive urban concentration and unsustainable negative externalities such as congestion and degradation of natural resources? Does the slowdown of demographic growth of the largest cities, whether Sao Paulo or Calcutta, and the growth of urban regions and secondary urban centers imply the need to revise urban economic thinking about economies of scale and agglomeration?

And finally, crucial to all these questions is the issue of urban environmental governance. Does preoccupation with environmental degradation imply a new set of challenges for urban government? How will mayors and other public officials deal with the environmental problems their cities are now facing?

These questions suggest that we are at the beginning of an exciting intellectual journey on the subject of the world's urban environment. At the World Bank we are committed to improving the quality of life for the world's urban residents. We must push the frontier and be proactive in radically changing the ways things are done. This will involve broadening the dialogue and cooperation involved in the design, preparation, and appraisal of urban environmental projects; increasing the institution's allocation of staff to the urban environmental sector; and providing increased assistance to countries in establishing National Environmental Action Plans.

We will work with local and national governments, NGOs, and other professional groups to establish explicit objectives for improved performance and to develop clear indicators of success for urban environmental projects. Finally, we will work closely with other international agencies to coordinate and rationalize the delivery of high-quality assistance to help alleviate the human problem—especially among the poor—of environmental decay.

The Urban Age *aims to stimulate lively debate and interaction on various topics in developed and developing countries. The ideas expressed in articles appearing in* The Urban Age *reflect the personal comments of each author, and are not representative of any one agency or organization. Individual articles appearing in* The Urban Age *may be reproduced or reprinted provided the author(s) and* The Urban Age *are cited, and a courtesy copy is sent to* The Urban Age.

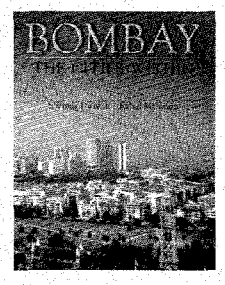
BOMBAY

continued from page 1

To encourage development away from this southern core, in 1947 the government developed a master plan, which called for industries, then predominately textile mills located in South Bombay, to be moved to the peripheries of Greater Bombay, and for a new township to be created mid-way up the peninsula at Vasai. These same themes were brought out in 1964 through the Development Plan of Greater Bombay, which added a new element to the "decongestion" ideology. The plan introduced the idea of FSI, or floor space index, a system that fixed the ratios of combined gross floor area of all storeys of buildings to the total area of the plot they were situated in. The FSI did away with the notion of planning on an area-wide basis, based on perceived needs, and became the measure upon which all future development was regulated.

In 1965 the government introduced a ban on office space in the downtown area—a policy still in effect—and argued for commercial activities to be located in new centers in the northern suburbs. Two years later, in its most direct attempt to encourage development away from the city's core, the Bombay Metropolitan Regional Planning Board launched New Bombay. This new city to the east, across Thana Creek, was originally envisaged to house the state government offices then located in South Bombay. This transfer of office locations never occured, leaving New Bombay as largely a bedroom community to the still-congested peninsula. Today New Bombay is growing rapidly and its population is approaching 2 million.

Bombay: The Cities Within



by Sharada Dwivedi and Rahul Mehrotra. India Book House PVT Ltd, Bombay, 1995. ISBN: 81-85028-80-X

Divided into four books *Cities Within* charts the progress of Bombay's haphazard physical, cultural and social development: it is the history of the journey of a city from settlement to metropolis. The book describes the evolution of Bombay through a textual and pictorial collage; its different architectural styles and urban forms and its varied ethnic and social groups unfold to reveal the multiple worlds that comprise Bombay which have moulded the same physical space for centuries.

Using exquisite photos from archives all over the world Bombay as urban phenomenon emerges from the pages: living museum, cultural maelstrom, financial hub, and hawkers paradise. All the shades of life a city can contain and imprint on its inhabitants are found in this city within a city.

The question must always be asked about a city: what is its purpose? As contemporary cities evolve they adopt different functions. The question the authors raise is to how to keep an existing city going; how to renew and revitalize it. The answer we are told lies with its citizens as their imagination and will, will determine the future nature of the urban phenomenon that is Bombay.

At the same time that the growth of Greater Bombay (to the north) and New Bombay attempted to decongest the old city, the government's decision not to move to New Bombay caused it to "implode" physically. The state government sanctioned land reclamations at the southernmost tip of the peninsula, at Nariman Point and Cuff Parade, and continued to expand its activities in South Bombay. This intensified rather than decongested activities in the old center.

Regulations that stifle

Planning attempts to decongest South Bombay have been accompanied by land-use and housing regulations that have limited the supply of land, thus keeping prices high and out of reach to even the middle class. Most prominent of these regulations are the Rent Control Act, first imposed as early as 1942, and the Urban Land Ceiling Act of 1976. The Rent Control Act froze rents on already existing properties in South Bombay at the 1940 rental value and properties built later at their initial rental value. The act has made investment in rental buildings unprofitable to landlords; hence, there is little incentive for them to maintain the housing stock. Although some new housing construction is exempt from the control, it has not been able to keep pace with demand and has been priced too high to be within the reach of average income earners.

What this has done is to "degentrify" the inner city. Landlords have subdivided residences vacated by the rich, turning once grand houses into multi-family residences that house increasing numbers of people. As there is no renewal of the housing stock, people, including migrants coming into the city, have no place to live and end up squatting. An estimated 60-70,000 units are locked up by rent control in the central part of the city.

The Land Ceiling Act makes it illegal for anybody but the state to buy more than 500 square meters of land in Bombay, which makes it virtually impossible to build new office space—one cause of the skyrocketing rents (new office rents average US$80.00 per square foot, nearly twice the cost in New York City). The cost of owned office space has skyrocketed from US$300 per square foot in 1991 to a whopping US$1,200 per square foot today. Business leaders now fear that Bombay will price itself out of the market for attracting international investment.

The result?

What has been the result of these attempts at decongestion? Unfortunately, South Bombay and its northern suburbs remain overcrowded, the housing stock is dilapidated, infrastructure is inadequate and poorly maintained, and land prices are soaring. The poor, to live near their jobs, squat along railroad tracks, pavements—basically anywhere there is open land. The rent control laws make it virtually impossible to raise enough municipal revenues to construct the necessary infrastructure, and the city cannot provide services or housing that keeps pace with its rapid economic growth. D.T. Joseph, Secretary of Urban Development for the State of Maharastra, admits "that our housing policy has failed..." and that attempts to create new employment hubs within the city have met with mixed results. "When new capitals are built," he says, alluding to attempts to "construct" new economic centers within cities, "it is not to decongest a city, but to create something grand or to improve the city's functioning. Bombay was never constructed for that; it was constructed for trade and commerce from the beginning."

Most agree that the Rental Control Act needs revision. But there is concern, as well, that the freeing up of regulations will benefit only the wealthy. "It would take so long for the market to bring prices down to affordable levels that only the wealthy would benefit," says Joseph. Even when housing and property rights are made available to slum dwellers, the inflated prices on the units entice many of them to sell. While profits are made, they are seldom enough to enable slum dwellers to buy new housing; hence, they go back to the slums they once lived in.

Secretary Joseph sees the need to revise some of the land control regulations. However, getting rid of stifling regulations is only part of the solution, a point of view shared by V.K. Phatak of the Bombay Metropolitan Regional Development Authority. Any freeing up of the

continued on page 5

BOMBAY

continued from page 4

market must be accompanied by infrastructure development. "It is not as if land were not available," says Joseph, "we have seen how well people have done space planning in other cities, and we can always allow vertical expansion of the housing stock. But we can only allow this in tandem with infrastructure development."

The housing problem in Bombay is compounded by the inability of the municipal government to raise adequate tax revenues, in part due to the rent control laws mentioned earlier. Property taxes are based on rental income derived from property and not on the true market value of the property. As the rent act freezes rental income, property taxes remain low despite the rising market value of housing and rental properties. This has serious consequences for the city's municipal finances. As the economic growth of the city is not adequately captured by the tax system, funds to construct much-needed infrastructure and to provide other services are not available.

According to Joseph, "the government is worried about how to build up infrastructure in these areas. Already we have to go 130 km to get our water supply, and in the future we will have to go further. Sewerage is five times more expensive than water." In addition to the tax distortions caused by the rent control act, taxes on commercial and newly built properties are inadequate. Phatak, of the Metropolitan Regional Development Authority, agrees: "We cannot afford to allow the market to run without an adequate property tax so that government can capture revenue to pay for services. Deregulation by itself is not adequate. Infrastructure support is even more important; the two must go hand-in-hand."

Living conditions

What does all this mean to the average Bombayite—one who may have migrated to the city five years ago and lives in the slums of Dharavi? If we talk about the human environment of the city, are we talking only about the physical qualities of urban life—the square footage of a person's dwelling, whether they can reach fresh water, or have electricity? Or is there something beyond the physical environment that makes life in the city worthwhile?

What has happened in Bombay is that, in essence, two cities living side by side have developed—the *Kutcha* city, where the poor live in slums, and the *Pukka* city—where the wealthy live, often in high rise buildings. As Rahul Mehrotra and Sharada Dwivedi describe it in *Bombay, The Cities Within* (see box, p. 4), "These 'two worlds' exist in the same 'space' but share, understand, and use it differently...the economic relationship between exploitation and dependency is one of the most important factors that give the 'two worlds' in the city their distinctive physical shapes and relative locations. One world is static, monumental in its presence and exploitative of the high spots in the city; the other sprawls along the transport lines and into any interstices or crevices it finds."

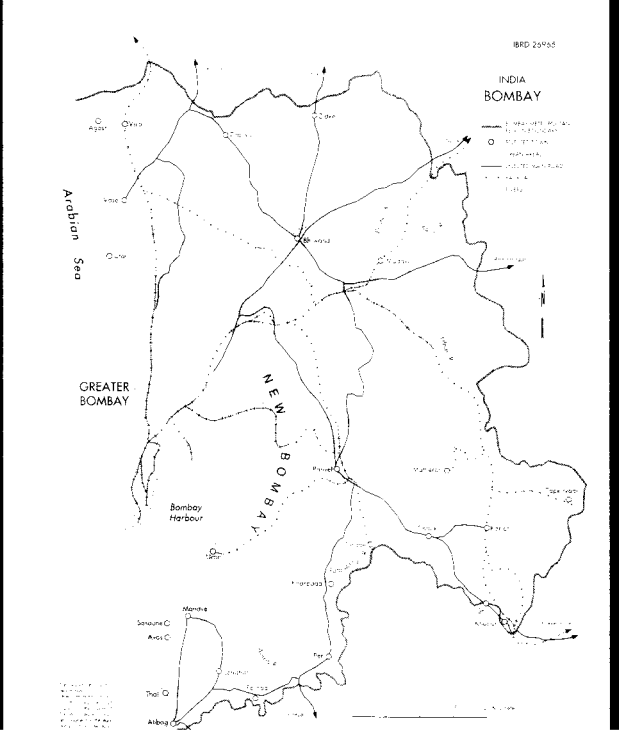
The symbiotic character of these two cities is now more widely recognized. Although attempts have been made to restrict inflows of migrants to the city through a permit system, there seems to be an understanding on the part of both residents and the government that such restrictions would be impossible to enforce and do not make economic sense. The fact is that for the majority of Bombay's residents, the possibility of jobs and a future outweigh the costs of living without a solid roof over their heads or secure tenure of land. And for the wealthy, many of their household help live in the *Kutcha* city, in

The settlement of the Bombay Islands can be traced to a manor house built by a Portugese doctor, Garcia de Ota, in 1544. In the 1600s, under the Portugese, Bombay became a fortified settlement with enclaves that slowly developed outside its limits. By 1661, the Portugese had given the Bombay islands to Charles II as a wedding gift on his marriage to Catherine of Braganza, the Portugese princess. In 1668, the Crown leased the islands to the East India Company.

Bombay was built as a settlement by the British expressly to maintain trade links with India. To establish new trade networks it was necessary to create a connection with the hinterland. These connections drew migrants into the city, resulting in a city that is a collage of ethnic and social groups, architectural styles, and urban forms.

By the 1750s the East India Company's role had changed from trader to ruler and with that change came an interest in developing the expanding town more methodically. This growth gained impetus during the 1800s after the takeover of the city by the British Crown. In the 1860s industrialization led to an influx of population and wealth; this created an increase in land prices which encouraged the development of land reclamation projects. By the 1900s, with the introduction of the railways and improved public transportation, the land was opened up, the population dispersed north and eastwards, and the development of the suburbs began.

Bombay's transition to modernity in the 1920s and 1930s was accompanied by constant immigration and population growth. Its physical form has taken place on a north south axis; this development pattern has been intensified by an increase in migration since the 1950s. Now rural migrants form a significant part of the urban poor who live in slums in the same space with the rich—two worlds, one space.



BOMBAY

continued from page 5

The evolution of slums

Slum settlements—like all settlements—go through a maturing process. This is especially true of Bombay's slums, where some residents have lived on a particular patch of pavement for twenty, thirty, and even forty years. As slums persist, communities form, complete with neighborhood associations, microenterprises, and codes of behavior. In Jhoola Maidan, pavement dwellers proudly show off their shacks to visitors and talk about their monthly contribution to the community women's revolving fund. Many families have electricity; their children go to informal schools; and men hold down two, three, and four jobs. Life for them on the streets is preferable to life in rural villages where there is no potential for income and strict codes of conduct dictate day-to-day life.

The sense of community and industry within the slum areas often belies the grim physical conditions in which people live. Charles Correa, a well-known architect and resident of Bombay, argues that the slum dweller is "socially intact," even though his physical conditions may be a wreck. There has not yet been a breakdown in the social structure among most of those living in slums in Bombay, according to Correa. The people living in Dharavi are really middle-class, he believes. They would rather spend their money on educating their children than on building expensive homes.

Sheela Patel, who heads the Society for the Promotion of Area Resource Centres (SPARC), an organization that works with pavement dwellers to form cooperatives to design and build settlements they are able to afford, does not paint an unrealistically uplifting picture of the slum dwellers' life; she does, however, agree with the sense of dignity and community often found in poor neighorhoods. When asked what she feels makes Bombay a unique place, she responds, "Because a woman can walk or drive around alone at night and feel safe." Why? "Security comes," she says, "because most of the city is inhabited by people day and night. When poor people live cheek by jowl with the rich it creates conditions of mutual existence." She worries, however, that tolerance is disappearing as the culture of consumerism takes root, and that the government seems to be stepping back from arbitrating on behalf of the poor. "People say there should be less government because government has performed so poorly in the past," she says, "but to improve the quality of life, issues such as land tenure, access to basic amenities, and employment issues have to be looked at in an integrated way." For Patel, government must be willing to arbitrate between different groups to ensure these issues are addressed.

Birth of a new city

Recent census statistics show that in-migration from rural areas has slowed in recent years. The percentage of population increase due to in-migration declined from 47.0 percent in 1981 to 16.8 percent in 1991. This backs up Patel's contention that for the first time in several decades natural growth is exceeding growth from in-migration. "A whole new class of towns is growing rapidly," contends Patel, "We can no long say they [migrants] are spoiling everything."

Nonetheless, the number of slum dwellers in Bombay is overwhelming. Nearly 2 million people live on the pavements; 55 percent of the city's total population, or roughly 5 to 6 million people (a conservative estimate), live in slums in Greater Metropolitan Bombay, according to the latest census. Nearly half are squatting on public lands, the rest on privately-owned lands. A Supreme Court ruling in 1976 gave some rights to slum dwellers, and in general made it illegal to remove them from the land on which they were squatting. There are now about 95,000 families squatting around Bombay's two airports; 85,000 families live in the city's largest slum, Dharavi; and about 35,000 families are squatting near the railroad tracks, according to figures supplied by SPARC.

The government began as early as 1979 to transfer tenure of land to slum dwellers, but on a small scale. More recently, efforts have been made by government to bring the private sector into the business of providing housing in slum areas. A census conducted in 1976 gave slum dwellers a photo pass and number on their doorframe as identification for their dwelling. These doorframe numbers are now bought and sold in the informal market. The government has recently intro-

continued on page 7

Urban Development Program in Calcutta Integrates Environmental Concerns

by Kalyan Biswas

Kalyan Biswas is the principal secretary of the Forest and Environment Department in the government of West Bengal.

CALCUTTA. It was not fashionable to talk about the human face of urban development in the 1970s and 1980s. However, it has become imperative to do so in the urban environment debate of the 1990s.

Current levels of environmental degradation in Calcutta are severe and have led to significant economic and human losses in health, productivity, and amenity costs. These increasing levels of environmental degradation represent a significant threat to the poor of the city, many of whom have not had access to formal education, or are not reached by informal training and awareness campaigns that explain the causes of environmental problems.

Other impacts of environmental degradation, such as damage to local resources and ecosystems and risks from natural and man-made environmental hazards, occur when a city expands (intentionally or otherwise), or changes its nature from a consumer society to a production center, or when productivity and efficiency in the urban economy are increased. It is in such situations that the links between the city's built environment—that is the physical environment in which it is located, including soils, water resources, climate, and the biological environment, including flora and fauna, must be dynamically forged.

Over the last two decades, Calcutta's Urban Development Program (CUDP) has focused on the provision of basic infrastructural services. But CUDP has not sought to address the more severe pollution problems found in Calcutta, such as mitigating health threats from air pollution, water quality, and land contamination. CUDP's policy has been to offer engineering solutions to the growing demands for infrastructural services. The environmental dimension has not featured either in the assessment of need or in the analysis of the consequences of the proposed investments.

However, new CUDP policies are now being developed that require that sector-specific planning should be carried out within a framework of environmental priorities in which the sectoral linkages are clearly identified. But several questions remain unanswered: Have its policies been environmentally sensitive? Has CUDP boosted the urban economy? Has it improved health care? Has CUDP degraded or increased the water and land quality?

The creation of the Calcutta Environmental Management Strategy and Action Plan (CEMSAP), which will be launched with the help of the British Overseas Development Association, will make environmental management and protection a priority and put it at the top of the CUDP agenda. CEMSAP will complement existing urban

BOMBAY

continued from page 6

duced a scheme whereby slum dwellers and land owners can buy, for 15,000 rupees (US$485), the right to increase the amount of floor space built on a plot by 40 percent (an increase of FSI from 1.8 to 2.5). Other non-governmental initiatives include the establishment of a Railroad Slum Dwellers Association (RSDF) to help about 18,000 families who live near to the railroad tracks to negotiate with the railways for land tenure and basic amenities. Seven hundred families in three communities have volunteered to move their households from 5 feet from the tracks back to 30 feet. The hope is that this will be seen as a first step in the negotiation process.

Despite these attempts, the challenge of tremendous demographic growth to the north remains. Transporting these residents to their jobs in the city's core is not an easy task. Each day more than 5 million people ride on the overcrowded trains running from the northern part of the city into South Bombay; another 5 million commute by bus. Commuting times run anywhere from one to three hours each way. Although the trains run on time (one arrives every three minutes during rush hours), they are overcrowded and badly need capital improvements. The World Bank, as part of a broader Urban Transport Project, is planning to make capital available to increase the capacity and efficiency of the rail system by upgrading the tracks, building one or more new lines, and rehabilitating current stations. This kind of upgrading is essential, as an estimated 500 new cars are registered in Bombay each day; roads are clogged, and air quality is already poor.

A question of governance

"...the growth of a town—any town," writes Gillian Tindall in her introduction to *City of Gold*, "is not just an unfortunate mishap to be rectified or ameliorated by the application of 'welfare,' grandiose planning and free contraceptives. Whatever the disadvantages of this growth, it is also a positive trend with economic and human resources behind it."

These sentiments could be applied to any number of burgeoning cities in the developing world, where economic prosperity is injecting

continued on page 28 ▶

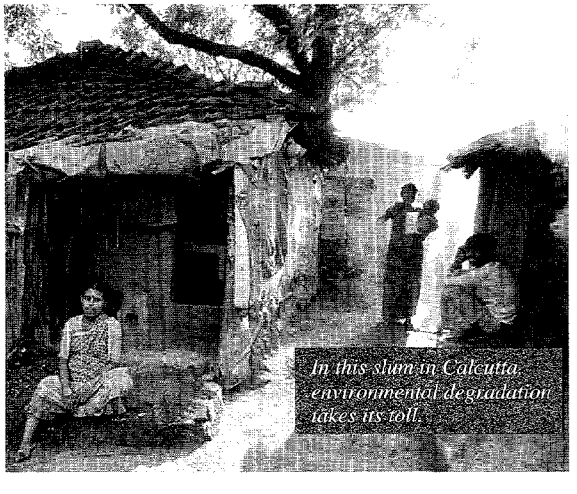
Urban Sustainability: Global Facts and Figures.

- According to the UN, urban concentration is increasing rapidly. Until recently the world ratio of urban to rural population was 1:7. But 50 percent of the world's population will be urban by the year 2000.
- The ten largest cities in the world in 1990 were Tokyo (23.4 million), Mexico City (20.2 mn), Sao Paulo (17.4 mn), New York (16.2 mn), Shanghai (11.8 mn), Los Angeles (11.9 mn), Calcutta (11.5 mn), Buenos Aires (11.5 mn), Bombay (11.2 mn), and Seoul (11.0 mn). Except for Tokyo and New York, all the other cities' populations are projected to increase by the year 2000.
- At present approximately half of the urban population of developing countries is located in 394 cities with populations exceeding 500,000. By the year 2000 the number of such cities will have exceeded 500.
- In Africa in 1993 over 60 million people lacked even the most rudimentary sanitation services, and 48 million did not have access to water supply. In India 90 million were deprived of basic sanitation, and 22 million had no water services. The situation in Latin America was 22 million people without water supply, and 25 million lacking basic sanitation. In China the situation was comparatively better: 18 million Chinese did not have basic sanitation, and 22 million lacked water supply. Even in OECD countries some 330 million people were not served by wastewater treatment plants in 1991.
- Cairo provides an illustration of how related environmental, sanitation, and health problems can be: Because of a lack of basic infrastructure, although 70 percent of the city is connected to the public sewerage system, only 15 percent of the waste water collected is fully treated. Twenty-five percent is partially treated, and 60 percent is carried untreated for 200 kilometres by open canals to Lake Manzaleh, and then on to the sea.
- In 1990 noise levels according to a range of 1-10 were the highest in the following 14 cities: Karachi (9), Lahore (8), Madras (8), Madrid (8), New York (8), London (8), Seoul (7), Santiago (7), Rio de Janeiro (7), Istanbul (7), Bangkok (7), Cairo (7), Lagos (7), Lima (7). And clean air levels, out of a score of 10, were the worst in the following 9 cities: Beijing (1), Calcutta (1), Delhi (1), Jakarta (1), Milan (1), Shenyang (1), Tehran (1), Mexico City (2), St. Petersburg (2).

See Sources, p. 28.

development programs because it will address the environmental opportunities and constraints to achieving the goals of CUDP. CEMSAP will also conduct an economic assessment of existing policies and practices for environmental management. It will hold consultations with primary and secondary stakeholders and will help user groups assess the willingness of the public to pay for different preferred options.

Certain elements of CEMSAP could, if implemented without regard for social concerns, exacerbate the plight of the poor. Examples of this include the enforcement of the "polluter pays" principle without regard to ability to pay and job losses that might result from factory closures or technology change. While CEMSAP will try to reduce environmental degradation, some components of its strategy may themselves create significant adverse environmental impacts due to policies and practices recommended by it and the resultant action plan.



In this slum in Calcutta, environmental degradation takes its toll.

CEMSAP and CUDP together, however, should be able to address questions such as: What kind of Calcutta should people expect to live in within ten to 15 years? How healthy, productive, and environmentally safe will Calcutta be in the future? And, will Calcutta have, apart from its physical environment, a human face to present to prospective investors and settlers?

Urban Growth and the Environment in Shanghai

In recent years Shanghai has become the "head of the dragon" of China's booming economy. Between 1992 and 1993, the city's Gross Domestic Product (GDP) jumped 14.9 percent, reaching a total of about US$17.4 billion in 1993. This growth has fueled the need for urban infrastructure, launching a construction boom perhaps unprecedented in history. The total capital invested in urban infrastructure in the 1990s has already far surpassed that invested during the entire decade of the 1980s.

This massive construction effort is being led by the municipal government of Shanghai. A new subway line running north to south has been completed, and a second line to connect the eastern and western parts of the city is under construction. An elevated ring road now connects downtown areas to the surrounding suburbs. A wastewater and sewerage disposal system is being built to serve the northern parts of the city, with a second wastewater conveyor planned for southern Shanghai. Also underway is a US$457 million environmental project, financed in part by the World Bank, to improve the quantity and quality of water available to Shanghai's burgeoning population (see story, opposite).

As Edward Leman points out below, the pace of construction is changing the landscape of the city. Nearly 10 million square meters of public housing, mostly high-rise apartment buildings, are being built t house residents relocated from the city's downtown core. A new business and financial district is under construction in the Pudong area, to the east of the Huangpu River, and industrial plants and factories are being moved from the old city center to the northern and southwestern suburbs.

In visiting Shanghai, one is impressed by the scale of the city's development. The obvious question is what effect such development is having on the city's environment. "Without economic development we have no money to improve the environment," says Lu Fu Kuan, forme head of Shanghai's Environmental Protection Bureau and a current member of Shanghai's Municipal People's Congress. Kuan has been instrumental in gaining passage of new environmental regulations that will ensure that development and environmental concerns go hand-in-hand. "We have updated our regulations to suit the market system; it is now possible to control the levels of growth if they go against the environmental law." To do so, he continues, "is the responsibility of us all."

—Mary McNe

The Changing Face of Shanghai

by Edward Leman

SHANGHAI. Largely insulated from economic reforms that transformed China's southern region in the 1980s, Shanghai is now undergoing a process of change perhaps unprecedented in Asian cities. With a population of almost 16 million in the greater metropolitan area, the municipality is rapidly evolving from a collection of large state-owned industries into China's principal entrepot and financial services center. In the process, it not only is responding to demands for entirely new kinds of infrastructure and facilities but also is dealing with a legacy of forty years of pollution and resource depletion.

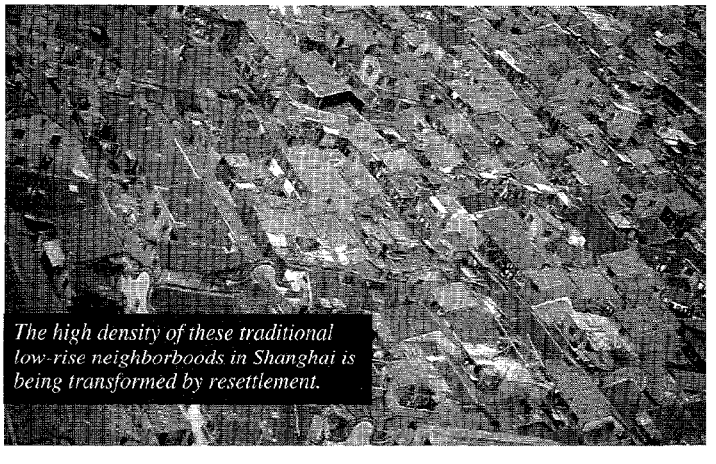
Shanghai's ten thousand industrial enterprises are scattered throughout the city. Since early in this decade, Shanghai's government has been actively promoting a policy of large-scale industrial relocation. With the emergence of a booming real estate market, industries are now finding it possible to pay for new facilities in suburban districts and county towns from sales of land-use rights for sites that are often in prime inner city locations. The result is that the structure of the inner city is changing dramatically.

Entire neighborhoods are being cleared to make way for new office buildings, retail facilities, and elevated expressways to support Shanghai's tertiary sector growth. Once quaint streetscapes, built in the early part of this century during the city's heydey as a foreign enclave, are being replaced by high-rise towers and retail podiums. Although key heritage sites are protected, including the historic Bund area, the urban fabric of dense, low-rise neighborhoods is rapidly being transformed. Over 300,000 households have been resettled in the past few years to make way for redevelopment projects, and government officials predict at least as many will need to be relocated by the end of this decade, often to suburban districts.

Move to the suburbs

While inner city redevelopment is reducing densities and ridding the core area of industries, it is also causing a radical shift in the industrial structure of the city as a whole. Suburban districts and county towns are booming as their local economies reorient from farming to both large-scale heavy industry and to light manufacturing. Some districts ar now registering annual GDP growth rates of as much as 30 percent; the gross value of manufactured output in Quingpu County increased by 50 percent last year alone. The environmental implications of this shift are far-reaching. Shanghai's industries created 1.3 billion tons of

continued on page 10



The high density of these traditional low-rise neighborhoods in Shanghai is being transformed by resettlement.

Quality Water for Shanghai

by Mike Burley

SHANGHAI. Shanghai's remarkable industrial expansion in recent years has made it one of the most prosperous areas in China. But there has been a price to pay. Most of Shanghai's water comes from an intake on the Huangpu River, which runs northwards through the city to join the mighty Yangtze. Heavy industrial development has steadily encroached on the intake zone and increasing pollution threatens river water quality.

Recognizing the impact this could have on future economic growth, the Shanghai municipal government started work on a major environmental program to improve water quality and control pollution. The World Bank agreed in principle to fund this vast scheme—The Shanghai Environment Project—subject to a major design review and advisory consultancy to examine the work done so far before helping to complete it. Britain's Overseas Development Administration (ODA) undertook to finance this two-year consultancy and appointed a specialist team to help the Chinese design institutes carry out feasibility and engineering studies leading to final design and tender documentation. The consultant team's role also involved reviewing institutional, financial, economic, environmental, health, and social development aspects.

Providing a new and sustainable water supply is one of the aims of The Shanghai Environment Project (SEP). This US$406 million component involves constructing a new 62.5 ms intake at Da Qiao—40 km upstream of the existing one at Linjiang—where the river is cleaner and less influenced by the tidal effects of the Yangtze. Raw water will be transferred from here to Linjiang for treatment by a huge 4 m x 14m multi-barrel conveyor over 25 km long. Also included is a major pumping station housing twelve 6.25 m 3/s low lift pumps.

Before starting any design work the consulting team first carried out extensive water quality modeling and hydraulic analyses, which confirmed that the new intake site at Da Qiao identified by the Shanghai municipal government presented the optimum solution. The consultants then helped their Chinese counterparts design the project component to international standards. With the consultancy now complete, construction of the new intake pumping station and conveyor is well under way.

Effective pollution control is of course essential to protect the quality of water abstracted from Da Qiao both now and in the future. From the outset it was therefore necessary to examine Shanghai's sources of industrial and municipal pollution and identify improvements to safeguard the new intake. To help develop control measures, a database of pollution sources covering an area of 23,800 km2 was compiled, containing information on over 600 identified sources. This made it possible to pinpoint the critical pollution sources within the upper river catchment and evaluate various control measures.

One such source is Songjiang, a rapidly expanding town of 110,00 people. Here the sewerage system has to be extended and wastewater treatment capacity nearly trebled to protect river water quality. As some 80 percent of the wastewater is industrial, a pilot treatment plant was set up to help optimize design of the enlarged plant, which will provide full wastewater and sludge treatment facilities for a flow of 78,000 m3/d. Regular monitoring of river water passing the new intake at the Da Qiao will be vital to ensure that quality requirements continue to be met. A comprehensive monitoring scheme has therefore been designed as part of the SEP, incorporating laboratory facilities at Da Qiao. Also included is a laboratory information management system to make sure that collected information is properly processed and disseminated for maximum benefit to the water companies and environmental protection bureaus.

Downstream at the Taopu Industrial Zone, reducing river pollution requires a new plant to treat 60,000 m3 of effluent a day from a projected 50 pharmaceutical and light chemical factories. As the nature of the effluent precludes conventional treatment, extensive pilot schemes were undertaken to develop a treatment able to achieve the desired effluent quality. Factory surveys were conducted so that on-site pretreatment facilities could be specified for individual effluents not complying with sewer discharge quality requirements. Economic analyses plus environmental and social impact studies were also carried out.

One of the SEP's most crucial pollution control schemes concerns the industrial areas of Wujing and Minhang, which lie between the new and existing river intakes. Here a network of large diameter trunk sewers with a peak capacity of 0.9 million m3/d will intercept the critical discharges affecting the Huangpu and convey them under the river for delivery into a major transfer system to be built as part of the Shanghai Second Sewerage Project (SSSP).

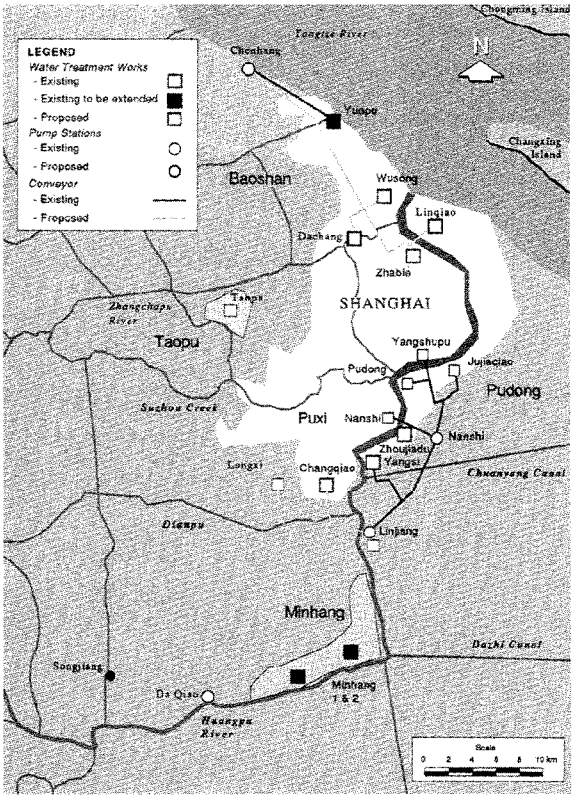
As well as improving the local environment, this vast sewerage scheme will provide another line of defense to safeguard river water quality in support of the SEP. Targeting the lower river catchment, its aim is to transfer sewage from the Puxi (west bank) and Pudong (east bank) for discharge—after appropriate treatment—through a long outfall into the Yangtze River at Bailonggang and hence to the East China Sea.

The sewerage project is currently made possible by substantial funding from the Norwegian government. The first task is to review and update an earlier wastewater master plan to account for population shifts and new development—especially in Pudong, which is fast becoming one of the world's key industrial centers. To cater to new flows from Pudong, and expected growth in discharges, the SSSP will need to have a capacity of 5 million 3/d by the year 2020—making it the largest in the world.

As with the SEP, consultants are helping Chinese engineers to optimize solutions and finalize detailed designs, to be ready for the Shanghai Sewerage Company to begin construction in 1996. Since many of the relevant institutional, financial, and sociological aspects have already been addressed by SEP, the consultants' role focuses mainly on engineering.

On account of its huge scale, the sewerage project is being split into three stages, each comprising a siphon beneath the Huangpu feeding into a separate conveyor to Bailonggang. The first stage centers on the southernmost section which, being the furthest upstream, will bring maximum initial benefits.

Addressing the SEP's and SSSP's potential impact on health and social development is a key element of the projects. Providing better drinking water—and more of it—can only serve to improve the population's general health and quality of life. At the same time it raises issues such as affordability, willingness to pay, and the effect of water quality protection zones on township and village economic life. Since public participation exercises are unusual in China, carrying out surveys in Shanghai presented a new challenge to many of the Chinese project staff. Several household surveys were successfully conducted, yielding useful information on attitudes to water tariffs and highlighting the need for locals to have more contact with those developing schemes for domestic water supply and wastewater disposal.



Mike Burley is Mott McDonald's project director for the Shanghai Environment Project and Second Sewerage Project. A specialist in urban water supply and wastewater supply treatment, he has spent over ten years working in China.

continued from page 9

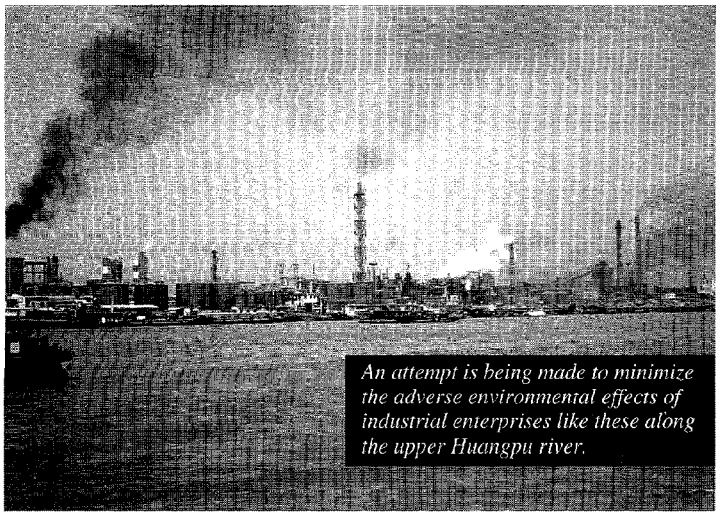
wastewater last year, 12 million tons of solid waste, and 360,000 tons of sulphur dioxide. As industrial development becomes dispersed among suburban districts and county towns, it will be increasingly necessary to monitor effluent discharges. Particularly high levels of industrial growth are now occuring along the Huangpu River, the source of 90 percent of Shanghai's drinking water. The World Bank is supporting major infrastructure projects in an attempt to monitor and minimize adverse environmental impacts of this development, and to protect water quality along the Huangpu River.

Industrial relocation

Recent research has found that industries are relocating not only to suburban Shanghai, but also beyond its border in the wider Yangtze delta region. Approximately half of the industrial output of the delta is now created outside of Shanghai, mostly in smaller townships and village enterprises; an industrial corridor is emerging which stretches almost 200 km from Shanghai to Suzhou, Wuxi, and Changzhou. Development is occuring in villages and hamlets with little or no land use controls and supporting municipal infrastructure. The entire corridor traverses the Taihu Lake Basin that feeds the Huangpu River, Shanghai's source of potable water.

Exacerbating demand for infrastructure in this corridor is a large and growing number of rural migrants seeking employment in construction and industry. At the present time, there are an estimated 9 million migrant workers and dependents in the Yangtze delta region. Labor demand is expected to continue at very high rates; the migrant population is anticipated to grow by 10 percent annually well into the next decade. This means that there could be as many as 22 million migrants in the Yangtze delta by the year 2005.

While Shanghai is succeeding in transforming its economy from secondary to tertiary sectors, the surrounding region is changing from agriculture to industry. Unplanned development threatens not only to deplete cultivated land, but to affect the air and water quality in Shanghai. Confronting this situation will be challenging from an institutional perspective: the delta area traverses not only Shanghai but also Zhejiang Province in the south, Jiangsu Province in the north, and Anhui Province to the west. There are 225 cities, towns, and counties in the Yangtze Delta Economic Region with a population of 193 million, slightly more than the population of Indonesia. Competition among local governments for industrial investment is strong; it will be difficult for them to incur the heavy costs of environmental infrastructure that might affect their municipality's competitive advantage.



An attempt is being made to minimize the adverse environmental effects of industrial enterprises like these along the upper Huangpu river.

Notwithstanding these constraints, Shanghai needs to take the lead in formulating a regional environmental program that ensures that the large investments it is now making in protecting the quality of its water, air, and land resources are not canceled out by uncontrolled development in the wider Yangtze delta area. UA

Edward Leman is president of Chreod Ltd., development planning consultants based in Ottawa. Chreod began working with the Shanghai municipal government in 1988, and has provided services to local government, the World Bank, the Asian Development Bank, and private investors. It recently completed a review of development trends in the Yantgtze Delta Economic Region.

Environmental Education in Shanghai

Jijiang Wang is a reporter for the Shanghai Environmental Education Centre.

The Shanghai Environmental Education Center was set up by the Shanghai Environmental Protection Bureau in 1984 to promote environmental education, environmental protection, increase environmental consciousness, and mobilize public participation.

Since its creation 11 years ago, the Center has provided the general public with environmental protection education by publishing science articles and literary and artistic works through the establishment of a weekly newspaper called the *Shanghai Environment Press*, which also helps to promote special occasions, including the Planting Festival, Earth Day, and World Environment Day.

The Center has also developed an audio-visual education department, a public education section, and a youth education department. Over 30 senior and middle-ranking professional personnel provide different types of environmental education to the city's youth, professional environmental staff, and to the general public by means of newspaper, television programs, publications, lectures and training courses.

Education for staff is mainly done through environmental protection training, which raises environmental consciousness while at the same time improving their work skills. Education for professional environmental staff aims to provide primary, intermediate, and senior training in various forms based on their different educational backgrounds and work history. The Center has organized courses in environmental impact assessment for the Asia Development Bank and the World Bank and, with a Japanese specialist, provided senior training courses on air pollution control.

Youth environmental education programs consist of two types: programs for students in primary schools and middle schools, and programs for students in technical secondary schools, colleges, and universities. Education for the first group is organized and implemented by the Shanghai Primary and Middle School Environmental Education Coordination Committee, comprised of experts from the Shanghai Environmental Protection Bureau and the Shanghai Education Bureau. Education for the students in primary schools is delivered through classroom instruction; education for the students in middle schools is delivered through physics, chemistry, biology, and geography classes. Some schools also carry out extracurricular environmental interest activities, including environmental inspection, social investigation, and experiments. Since 1981, environmental protection summer camp activities have been organized by the municipality, districts, and counties. To maintain long-term environmental education programs in primary and middle schools, the Center organizes a training program for school principals and environmental teachers, preparing teaching materials and organizing environmental knowledge competitions.

Environmental education for students in technical secondary schools, colleges, and universities is mainly professional education; for example, some courses include environmental monitoring, environmental engineering, and environmental medical sciences. Some colleges and universities have also set up specific departments or classes to teach the same subjects. There is also an environmental law department in some of the universities. For other university students, there are introductory courses on the environment and extracurricular environmental study and investigation courses.

Metropolitan Development in Asia

by Ephim Shluger

Ephim Shluger is an urban specialist with the Economic Development Institute of the World Bank, and is the task manager of a series of regional metropolitan development and environmental management seminars recently held in Japan and China. This article is based on an overview paper he prepared and delivered in Japan.

Since the 1950s, the world's urban population has increased fourfold, from 300 million to about 1.3 billion. In 1992, 21 of the largest metropolitan areas in the world were in Asia. Greater Tokyo is the largest metropolis, with 25.8 million residents, and its population is expected to reach 28 million by the year 2000.

Studies suggest that urbanization is a result of a continuum of economic development cycles that is based on a strong outward orientation, and an emphasis on the development of both human resources and urban infrastructure. In countries such as Japan, South Korea, and Taiwan, which have experienced a rapid demographic transition, urban expansion is sustained by an unusually stable institutional framework. Countries like China, Indonesia, and Thailand have also experienced a large population expansion in their cities, despite their more modest economic growth performance compared to the countries of the High Performing Asian Economies (HPAEs) group.

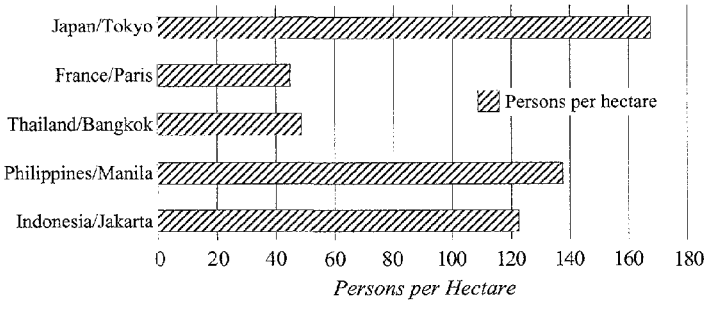
All these countries face special challenges, in particular, a need to improve their infrastructure bottlenecks and to satisfy an increased demand for housing and urban services, which require sizeable investments. In a period of exceptionally rapid economic growth, these countries have adopted new strategies to meet their infrastructure needs, by effecting policy reforms in land use regulations, transportation, and environmental management. Bangkok and Jakarta are presently engaged in large-scale urban transport projects, while Shanghai and Tokyo have both initiated large-scale urban redevelopment programs.

The exceptional metropolitan growth found in metropolitan Tokyo—where the population has tripled in the last forty years—calls for consistent and massive capital investment in infrastructure development.

There are four key areas of public infrastructure development that help to promote a metropolitan area's efficient growth.

• Land development should follow market forces. Effective land registration and progressive taxation can lead to optimal land use.

Urban Population Density: Persons per Hectare



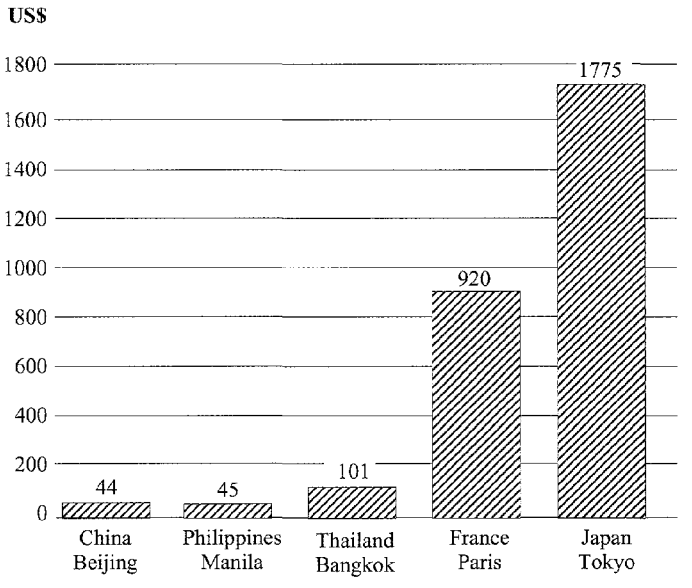
Source: The Housing Indicators Program: Unpublished Preliminary Results of the Extensive Survey of Housing Indicators for 1990 (revised October, 1993). Washington, DC: UNCHS and the World Bank, 1993.

• An effective urban transport strategy, which takes into account traffic management methods, alternative public transport modes, and environmental externalities can be used successfully to guide an urban area's productivity.

• The loss in regional productivity, particularly by the urban population, is measured by the direct and indirect effects of pollution in industrialized countries on public health. In contrast to higher-income industrialized countries, most developing countries lack an effective environmental regulatory framework. Where there is one, its implementation lacks effective regulatory control with realistic fines for those violating environmental standards; such measures create fundamental changes in the polluters' behavior and lead to the adoption of cleaner and safer production technologies.

• A critical issue in the housing sector is affordability, especially for the urban poor. Policies can be formulated to improve market conditions through strategies aimed at developing property rights, mortgage financing, providing infrastructure, and regulating land and housing development.

Comparative Infrastructure Expenditures per Capita[1]



1. This refers to the ratio of total expenditures (maintenance, operations, capital) by all levels of government in infrastructure services (roads, sewerage, drainage, water supply, electricity, garbage collection)during 1990 and to the urban population.

2. These data refer to information based on expenditure levels in the late 1980s.

Source: The Housing Indicators Program: Unpublished Preliminary Results of the Extensive Survey of Housing Indicators for 1990 (revised April, 1993). Washgton, DC: UNCHS and the World Bank, 1993.

Asia's metropolitan areas have become the loci and the engine of economic development. The rapid growth of these large urban centers has outpaced the governments' capacity to meet the increasing demand for the provision of basic infrastructure networks. Deficiencies in infrastructure exact considerable macroeconomic and social costs. The public sector alone cannot sustain tandem investments in infrastructure and human capital development. Resources need to be mobilized in the private sector and from household savings.

Current trends in decentralization, as well as privatization of public enterprises, are pushing municipal governments toward innovative partnerships with the private sector in facilitating

continued on page 12

continued from page 11

investments in urban services. For example, the creation of a third sector arrangement between public and private partnerships. These trends have been synthesized into a World Bank urban policy agenda for the 1990s, which calls for strengthening urban infrastructure management, improving regulatory frameworks, increasing market efficiency, and enabling private sector participation.

The development equation in the 1990s recognizes that environmental concerns and social progress are as important as economic growth. Alleviating poverty through targeted interventions to reach the urban poor is a vast challenge facing countries in the region. Social policies such as expanding productive employment, coupled with improved access to essential services, are aimed at reducing poverty and its consequences, such as malnutrition, ill health, and illiteracy. In pursuit of these policy goals, strategies aimed at expanding the urban poor's employment opportunities through labor-intensive public works programs, and granting fiscal incentives to microenterprises to spur job creation, are becoming an integral part of a new breed of Social Action Initiatives in the countries of East Asia.

Currently, the Bank endorses the decentralization of governance, participatory development and environmentally sustainable use of natural resources, particularly that of potable water. A new participatory approach to the management of water replaces the old view that left most decisions of service provision up to governments. The new view allows consumers and neighborhoods a choice regarding the services they want and how to pay for them; this provides users with more choice, as well as responsibility, than did the former top-down approach. This approach is particularly appropriate for the poor, who, by and large, are left out of the decisions regarding provision of water and sanitation services (most of which benefit and subsidize non-poor users). Experience confirms that this new view is a sound principle that offers the best prospects for dealing with the demands for a more equitable and efficient distribution of scarce urban resources.

The heightened political awareness concerning the urban environment has placed greater responsibility in the hands of metropolitan authorities. For local governments to effectively design a city-specific urban environmental strategy, while also coordinating policy formulation among the myriad local agencies and monitoring and enforcing environmental standards regarding degradation of natural resources, requires an effective institutional framework able to coordinate intersectoral functions, and a well-trained and technically competent cadre of local staff.

In the HPAE countries, a strong emphasis on human resources development through staff training and retraining programs at all levels of government service has produced well-trained, competent, and dedicated cadres. This policy orientation could be an example for serious deliberation in the urbanizing regions of Asia as demand for the new technical skills increases and market dynamics come into play in planning, implementing, and operating urban programs and services.

The adoption of regulatory environmental policies and enabling legislation, the securing of an improved revenue base, supported by new planning methods, state-of-the-art instruments and management systems, and fostering community participation are all essential ingredients for effective urban management in the economically booming nations of Asia. UA

Tokyo: A Life in Transition

by Hideaki Hoshina

This article gives a glimpse of the daily life of a Tokyo resident and describes some of the domestic changes brought about by economic liberalization and democratization in Japan from 1960 to 1990. Hideaki Hoshina is a development specialist at the Institute for International Cooperation (JICA) in Tokyo, Japan.

TOKYO. Mr. B., fifty-two years old, currently lives in an 80 square meter apartment in a sub-center of Tokyo. He has a one hour commute to his office. His twenty-year old daughter and twenty-one year old son, both university students, separately rent apartments in other suburbs. He sends 150,000Yen or U.S.$1,700 a month to each of them for their rent out of his monthly salary of 600,000Yen or U.S.$6,700 a month before taxes. His wife also earns 150,000Yen or U.S.$1,700 a month on a part-time basis.

Mr. B. was born in Tokyo; he left home and started living separately from his parents when he went to university in the mid-1960s. He rented a room in an apartment house which his father paid for. The average room rent at this time was about 15,000Yen or U.S.$43 per month in a residential area of Tokyo; the salary of a graduate was about 45,000Yen or U.S.$130 a month. He spent most of his time studying and worked only part-time.

Tokyo in the 1960s

Tokyo in the 1960s was a city on the move: job opportunities were plentiful, family income was increasing, there was much construction being carried out as highways and commuter railway lines were being built. At the same time, however, chaos reigned on the university campuses as the student revolution erupted and politics became polarized between socialists and democrats over the Japan - America Security Treaty. Socially, the role of women became an issue for debate, particularly with the advent of more provocative women's fashions. All of these events occurred at a time of uncontrolled expansion and competition in the new post-war era, during which liberated Tokyo residents were allowed greater freedom of choice in their personal lives. Urban democracy seemed inevitable.

Aggressive urbanization in the 1960s led to the deterioration of the urban environment of Tokyo in the 1970s and 1980s. Unlimited increases in land prices made it difficult to acquire land for public works and for middle-income housing needs. People were forced to move further out of the city, which meant longer commutes, increased air pollution, and road accidents.

Life in the 1970s

In the 1970s Mr. B. was in his thirties, and had a wife and two small children. They lived together in an apartment of about 20 square meters, which had two small bedrooms, a kitchen, and a toilet. They would go to the public baths to bathe. The apartment rent was 25,000Yen or U.S.$100, which was about 35 percent of his monthly salary. His commute to the office was about one hour each way; he would leave home at 8:00 a.m. and come back around 11:00 p.m. every day, including sometimes on Sunday.

In the 1980s Japan's economy improved dramatically. The industrial structure of Tokyo had shifted from manufacturing to commerce and business after recovering from the effects of the oil shock. The development of a strong Japanese media stimulated growing debate about public and community affairs, health concerns, the environment, and quality of life issues. Simultaneously there were also increasing demands on young women to keep on working even after marriage. In this period family income increased rapidly.

Tokyo today

In the 1980s, Mr. B., now in his forties, finally managed to buy an apartment. It cost 20 millionYen or U.S.$300,000 of which 75 percent was covered by a government housing mortgage repayable within 25 years. For Mr. B. this is his final resting place: it has sufficient space and a central heating system to see him and his wife into their retirement.

In the early 1990s, a number of real estate and financial businesses failed due to the bubble economy created in the 1980s. Land prices in Tokyo fell and the big waterfront development projects in Tokyo Bay have been delayed. Many people believe that Tokyo has grown too big for itself and that its capital function should be transferred to another city. This may be a chance to examine urban democracy's role in the formation of metropolises and how democracy can be planned and designed in the form of a new capital for Japan.

Nairobi: Slum Upgrading in Mathare

by Wachira Kigotho

Wachira Kigotho is the science and education editor at the East African Standard. *He is also a regular contributor to the* Deutsche Universitate-Zeitung *and to the* Times Education Supplement *and the* Times Higher Education Supplement *in London.*

NAIROBI. The Mathare slum, which is the largest slum in East Africa, will be upgraded through the Mathare Slum Upgrading Scheme, which will provide new homes for about 25,000 families who now live in squalor and abject poverty. Currently, this sprawling estate of about 300,000 people has neither sanitation facilities nor garbage collection, neither roads, nor footpaths, and the supply of piped water is irregular.

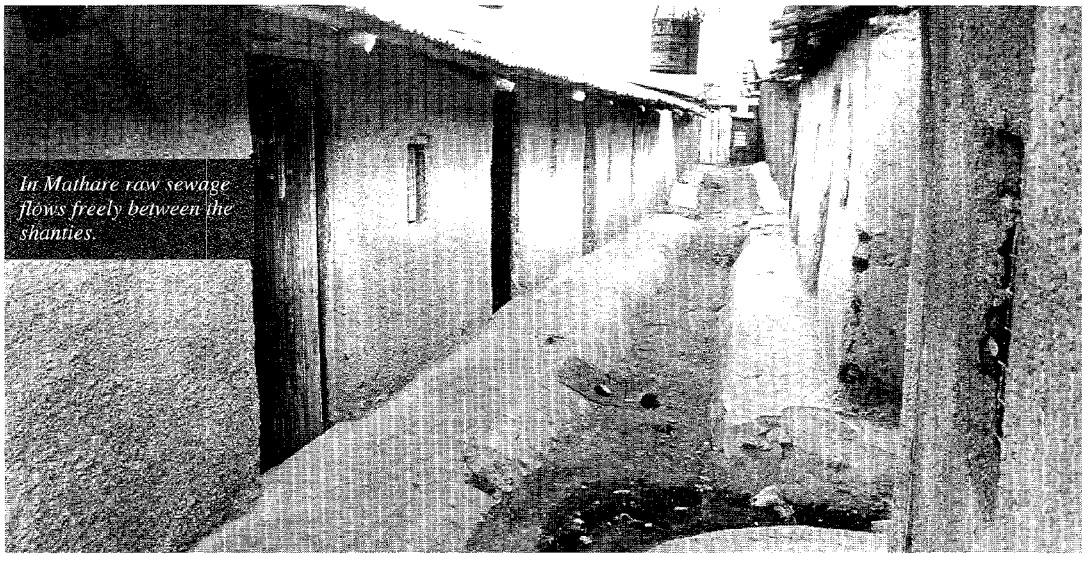
Apalling health conditions

A priest, Klaus Branreuter, working with slum children and single mothers at Mathare, says the estate is rife with malnutrition, malaria, diarrhea, skin diseases, sexually transmitted diseases, and AIDS. The area has also been a death trap for many residents because of poor environmental conditions. Pools of water during rainy seasons, as well as undrained and open sewage systems, are breeding grounds for mosquitoes. According to Dr. James Mungai, a medical researcher at the University of Nairobi, Mathare has always been at the top of the list of leading areas of malaria among children. Dr. Mungai says that the area also leads in the number of cases of abdominal worms in the country.

Slum upgrading met with opposition

But attempts to upgrade the slums and eventually provide decent housing for the families in Mathare have not been easy. The tug of war has been between the former plot owners and the project developers. The former plot owners are angry because they have not been able to collect rent from their tenants. The shacks that they had built and for which they had charged exorbitant rates are being razed, and they are complaining that their compensation is not enough. Last month they went to court to stop the upgrading of the slums.

According to Cardinal Maurice Otunga, Archbishop of Nairobi, the Mathare Slum Upgrading Scheme is one of the few projects that will give a human face to urban development in Kenya.



In Mathare raw sewage flows freely between the shanties.

"How can people oppose [it] and even go to court when all we are trying to do is minimize suffering and the harsh conditions of our people?" asks Otunga. Cardinal Otunga and many others working on the project envisage it as a lifeline for many people with no decent housing. They are also interested in using the success of the upgrading of Mathare to serve as a litmus test to attract donor funding to replicate the program in other slum areas in Nairobi and other cities.

The success of the project, says urban economist Erfried Neubauer, will reduce social tension in the estate. Neubauer, who has worked on the program since its inception, says the former landlords just "want to lord it over poor people by collecting rents without improving the sanitary and other primary health care conditions for tenants."

High Court dismisses landlords' suit

When the High Court dismissed the suit filed by the landlords, Branreuter described the ruling as a "victory for the downtrodden of Mathare." In his ruling a high court judge, Justice A.B. Shah, stressed that landlords had no freehold title deeds for the plots. He ruled that landlords' rights on the land were temporary, despite the fact that they had been collecting rents for plastic and wooden structures for over thirty years. Justice Shah summed it up as a situation in which squatters exploited other squatters—since the landlords who had brought the suit were not registered, and many others had never lived there, the court had no alternative but to allow the new developers access to the land to develop it for slum dwellers. As soon as this decision was taken, the slum dwellers went to the streets in support of the project. According to Fabian Ochuka, a Mathare resident, "people in Mathare would like to be given a chance to live in a healthier environment."

Already road construction and drainage work has started. Over 1,000 people are being housed in a temporary site, waiting to occupy the first housing units to be built. "Rents will be cheaper," says Stephen Muthua, a deputy project manager at the site. To Margaret Wanjiru, a single mother of eight, the improvement of Mathare 4A slum is one major step toward doing away with people who have always wanted to fleece slum residents.

Over the years, fire outbreaks have been occuring at Mathare because of the congested high density of wooden and plastic structures. Such fires were often blamed on landlords who wanted to evict tenants who refused to pay increased rents. Before the new developers moved in, Mathare used to be a haven for

continued on page 14 ▶

continued from page 13

gangs that terrorized Nairobi. Having no street lights, it was easy for thugs to run and hide there at night, while police patrols seldom managed to keep the peace.

Neubaeur thinks that the project should integrate other socioeconomic aspects as one way of helping the slum dwellers. He argues, however, that the first step is to make the estate more secure by putting in place modern housing units and easing congestion. To provide security, street lights are being put inside the project area. Toilet blocks for every ten houses are also being planned, as this area has never had lights or toilets.

Vocational training for Mathare residents

Plans are also underway to carry out an inventory of what type of economic programs could be introduced to some of the unemployed people. Branreuter says that community programs will be introduced gradually as new estates develop. The Undugu Society of Kenya, a non-governmental organisation specializing in helping street children, has been approached to start vocational training institutions for both boys and girls. According to the founder of the organisation Arnold Grol, 'Machuma' or metal schools will be introduced in various phases of the Mathare Slum Upgrading Scheme. Such programs as tailoring, blacksmithing, plumbing, gardening, and mechanics as well as carpentry and industrial design will be taught.

The Undugu Society will set up a center for providing information services on such subjects as business development programs, urban gardening, the organization of women groups, and health services. The issue is that the slum upgrading program should go hand-in-hand with improvement of people's socio-economic status; after giving affordable shelter to the slum dwellers, other needs should be taken into consideration.

Mathare residents empower themselves

In pursuing those goals, the Mathare people themselves have formed several committees to address their immediate problems. Says Gladys Njeri, a social worker at Mathare, "People in Mathare are now quite sensitized to their needs. They have organized several committees to deal with community work, health, rent, and education." However, as one way of determining who should benefit from the program, residents have set up another committee to identify genuine squatters in the area. They are also asking the program office to try and carry out a census of the people in the program to prevent people from taking advantage of it.

As Branreuter points out, Mathare is a unique social environment, in which people would like to make their own decisions. And the mayor, King'ori, admits: "In the past, projects meant for the poor seem to have benefited rich people. Mathare people are out to alter that." For now, the new developers plan to take care of some of the problems. A comprehensive environmental program is being integrated with the rest of the upgrading work. Playgrounds for the children are planned and trees are being planted. Since Mathare is located in a valley, and the area is flood prone, a huge draining system has been put in place.

For the people of Mathare, the new developers have come at the right time. Because of poverty, the area had become a locus for crime and disease. However, there seems to be some hope for the residents. The question is how long the situation will last and when changes will eventually erase the effects of underdevelopment there. UR

NEWSLINE

Housing Finance Forum

Over 100 housing and finance professionals from 19 countries participated in ECO-HAB International's first forum in New York on March 27 and 28, 1995. The forum was convened in cooperation with the United Nations Secretariat for Habitat II and other co-sponsoring organizations. The event included over 40 speakers and panelists from a variety of disciplines including banking, building, planning, philanthropy, and academia as well as representatives from non-governmental organizations and community-based organizations.

The focus of the forum was to discuss new ideas and recommendations for housing finance and how best to promote integrated community development. These recommendations will contribute to the preparatory process for the upcoming United Nations conference on shelter, Habitat II, to be held in Istanbul in June 1996.

"Shelter is more than a roof over your head. It's a centerpiece of human stability," said Peter Oberlander, special advisor to the Secretary General of the United Nations for Human Settlements, Habitat II. "In a world much changed since the early days of the human settlements launched during the 1982 Stockholm Conference on the Human Environment," said Oberlander, "any future action in this sector must go beyond governments. Agreements must now be framed in the context of doable, sustainable projects, and stress public and private partnerships."

"In parallel with the United Nations' current restructuring process, and as plans and preparations get underway for Habitat II, we have an unprecedented opportunity to revitalize efforts in housing finance," said Eric Carlson, president of ECO-HAB International. He recalled the Nairobi-based United Nations Habitat and Human Settlements Foundation, created by the U.N. General Assembly in 1975 to help countries with housing finance issues. During its brief existence it carried out a range of productive activities, and by its fourth anniversary had developed projects in more than 30 countries.

"I recommend that thorough, independent evaluations of global housing finance be undertaken, involving the concerned sectors, constituencies, and beneficiaries," said Carlson. "New action plans must be relevant to the vast changes that have taken place in world financial markets, among public/private sector partnerships or intermediary institutions, and in local capacity for development and wealth generation."

The forum's panel themes focused on both investment initiatives and community cooperation; the panels addressed four specific themes: investment perspectives, public sector initiatives, modern building approaches to community infrastructure development, and cooperative approaches to Habitat Development.

Highlights of recommendations presented at the Forum are:

- Issues of shelter and housing should be approached holistically.
- Local culture and preferences must be taken into account when addressing a community's shelter needs.
- Housing policy cannot be addressed without considering influences on population such as migration and resettlement.
- Housing can and should be used as a barometer of economic growth.
- Financial institutions should seek to understand and design technologies to accommodate the economic characteristics and financial needs of borrowers.
- Government support must continue to provide seed capital through various public and private partnerships.
- To make housing more affordable for all income groups, efficient and equitable housing delivery systems must be assured.

The conclusions drawn by the participants at the Forum were that the panorama of unique public-private sector partnerships available, linked with multi-source financing, innovative technologies, and access to small-scale credit systems, should stimulate economic activity while improving peoples' quality of life.

Feng Shui: The Strength of Tradition

by Lisa Solomon

Lisa Solomon is a Hong Kong-based employee of a company that establishes joint ventures in China.

HONG KONG. What inspires sophisticated Asian-based companies to pay for expensive consultants who can guarantee nothing more than peace of mind? This is an example of how traditional Chinese beliefs and customs permeate most facets of modern life. *Feng shui* (pronounced fung-shway) is taken very seriously in South China, Singapore, and Hong Kong. It is a mixture of Chinese philosophy, mythology and superstition. It focuses on theories of balance and harmony, such as *yin* and *yang* that are aimed at drawing out the natural "dragon's breath" or energy referred to as *chi*.

Long before it was a concern to modern businesses and a multi-million dollar industry, *feng shui* was a powerful force in Chinese society. The basis of this traditional Chinese pseudo-science, which translates as wind and water, is the assumption that if man wants to live in harmony with nature's elements and harness its awesome energy, certain spatial guidelines must be followed. Once a compatibility has been attained then peace, luck and prosperity will follow.

Thus *feng shui* masters—a new breed of consultants—are routinely hired to ensure that buildings, offices and homes are properly sited, designed, and decorated to bring good luck, peace of mind, and wealth to their clients. After an analysis conducted by one of these specialists in the art of geomancy, you might be directed to restructure your entire office, or simply add a small fishbowl to ensure the proper flow of *chi*.

Yang Yun Sang is considered to be the founder of this pre-modern science. Yun Sang lived during the Tang dynasty (618-907 AD) an era noted for its religious diversity and richness in the arts, dance, and music. Yun Sang based his principles on the shapes of the mountains and the movement of the water courses that flowed down their slopes. He believed that the contours of the hills that surrounded a location contained a "dragon" and a "tiger." The spot where these two metaphorical animals joined in harmony, generally near a body of water, was considered the ideal location for a home. *Feng shui* assessment also became essential to burial ceremonies. If the dead were not correctly positioned in the ground, then evil would reign upon the surviving family members. If properly laid to rest, however, the descendants would prosper.

Volumes have been written about how to maximize personal *feng shui*. Most books stress the importance of certain structural attributes and the placement of furniture in strategic locations according to surrounding geography. Colors and numbers also carry special significance and trees, plants, water, mirrors and light are often used to correct detrimental flows of *feng shui*. For example, if you live near water, luck is in store as water symbolizes wealth. Rounded corners of buildings are preferable to sharp edges, believed to emanate poisonous energy or *sha chi*, that cause bad luck.

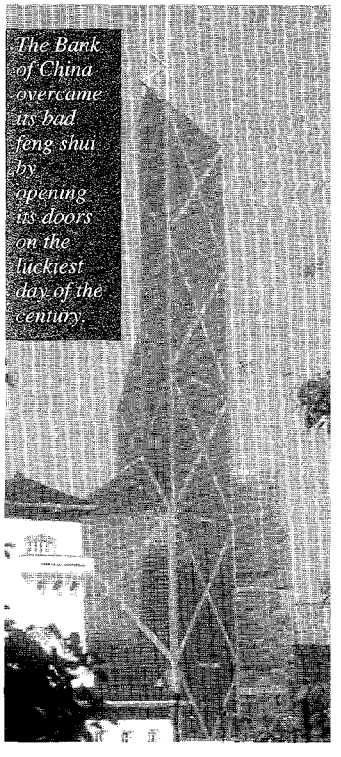
There are also examples of things not to do: At the office, avoid sitting with your back to the door because it invites ones colleagues to metaphorically stab you in the back. Similarly, never arrange your bed so that your feet face the door because this is considered to be the "death" position (in the old days, corpses were positioned this way before being carted to the graveyard.)

My first exposure to the influence of *feng shui* occurred one afternoon when I entered my supervisor's office in the Bank of China building and discovered burning incense and a spread of neatly prepared food and rice wine laid out on the window ledge. This was not happy hour, Hong Kong style, but an offering to appease the spirits in the room which were causing our colleagues to fall sick; my boss's particular office was emanating bad *feng shui* and the offerings were there to eliminate the negative energy in and around the room.

The management of my company is involved in sophisticated multi-million dollar deals. Could these be the same people who were offering chicken feet and rearranging the furniture in order to correct an imbalance of natural forces? Such matters are taken very seriously in this crossroads of the global economy and Chinese tradition. One large multinational company recently changed its logo after a visit from the *feng shui* master. It changed its blue logo to yellow, a color considered to be more auspicious because it represents the sun, nature's life force. The Bank of China building which has unlucky sharp angles tried to overcome its bad *feng shui* by opening its doors for business on one of the luckiest days of the century, August 8, 1988; the number eight is an extremely lucky number because it sounds in Mandarin like the Chinese word for prosperity.

The Hong Kong and Shanghai Banking Corporation's headquarters is an ideal case study in *feng shui* design. The bank is in a favorable location because it faces the water and is backed by the mountains. The building's facade incorporates upward pointing arrows that symbolize expansion; all of the floors open onto a central atrium which allows the free circulation of *chi*; and in order to keep the *chi* from escaping, the escalators are set at a deliberate angle away from the street.

Despite the mood of uncertainty in Hong Kong regarding the 1997 reversion to Chinese rule, one aspect of life will not change. *Feng shui* will continue to dominate in this society, as it has for a thousand years, warding off evil spirits and enhancing the luck, happiness and prosperity of all who follow its rules.



The Bank of China overcame its bad feng shui by opening its doors on the luckiest day of the century.

Berlin: The Rebuilding of a City

by Jonathan Foreman

Jonathan Foreman is a lawyer and freelance writer specializing in European affairs. He lives in New York City.

BERLIN. Berlin is a city at war: modernist and traditionalist architects are fighting for its soul, while its citizens wonder which group will be able to preserve and enhance the city's livability. Berlin's importance as a symbol of German power means that key decisions have been taken out of the hands of Berliners: a price they pay for their city becoming once again the capital of a united Germany. It was Germans rather than Berliners who clamored for this change, but it is Berliners who will pay for it, and foreigners alarmed by the symbolism who will scrutinize it.

With its competing traditions of political dissent, authoritarianism, and cosmopolitanism, the city evokes the brightest and darkest moments of modern German political history. Berlin was not only the seat of uprisings in 1848 and 1918, but was also the last city to be conquered by National Socialism. Berlin's darkest moments are etched forever in European historical consciousness.

Like other livable cities, Berlin is a life-enhancing random mix of old and new. It is a delight to walk around: in the Western section, thousands of small gardens—actually plots of land left ownerless and derelict since the war— are rented out by the city government. East of where the Wall stood, in the quiet streets around the Oranienbergstrasse—once one of Berlin's Jewish neighborhoods—artists have colonized unrestored buildings.

Berlin's architecture can go neither forward nor back, at least not painlessly. The traditionalists like Hans Stimman, the city's building director, abominate the glass and concrete "International Style" that has dominated most post-war reconstruction in Europe. He sees the vast housing blocks of the Stalinist East as a bastard child of international modernism.

Just off the Potsdammer Platz stands Goering's Air Ministry, designed by Albert Speer to express the ethos of the Nazi state. It is the acme of that era's surviving pseudo-classical gigantism and no one wants to see a return of that stylistic tradition. Some of the architects are very keen on the architecture of the Weimar Republic, particularly the Bauhaus experiments of Mies van der Rohe and Walter Gropius. Bauhaus' avant garde essays in worker housing proved to be unpopular with workers not just in Germany but in all countries where urban planners repeated the experiment. Stimman and his traditionalist followers are suspicious of the socialist roots of the Bauhaus and the international movement that it spawned. Others are disturbed by the political and aesthetic arrogance of the movement, which presumed to know how subordinate strata should be housed for their betterment. Yet a new city inspired by the 1920s, a time which most Berliners remember as an era not just of artistic decadence but of despair and political extremism, is not really an option.

The remaining buildings of the Wilhelmine period, from unification in 1870 to 1918, although admired by Stimman, are to many Berliners brutal reminders of a militaristic authoritarian culture. The most famous Wilhelmine structure (apart from the Victory column in the Tiergarten), the Reichstag, which is undergoing reovation, will be the seat of the German federal parliament. This beautifully reconstructed building will always elicit memories of democracy's fragility. It is the home of Bismarck's browbeaten, jerrymandered assembly; the Spartakist revolution in 1918; the atrocities in the wake of the 1933 fire; and the Soviet soldiers waving the red flag from the roof in 1945.

The school of international postmodernism is favored by many of the multinational corporations keen to make Berlin their European headquarters. With the possible exception of Daniel Libeskind's Jewish Museum, many of the new buildings look problematic, both as symbols of the new Berlin and as a solution to an empty inner city. The Potsdammer Platz, now a desolate construction site in the center of Berlin, was once the city's equivalent of Picadilly Circus, as well as the locus of Hitler's Reichs Chancellory. Sony and Daimler Benz are building their European headquarters here. The deals were made with remarkable speed after the Wall came down, and many Berliners wish more thought had been given to making the space more people-friendly and less a symbol of corporate power in the new Germany.

German identity is not yet a settled issue—hence the intensity of the arguments about the shape Germany's future capital will take. But a Berlin identity does exist and should be allowed to thrive. A large part of that identity is a glorious cosmopolitanism that Hitler failed to destroy. As far back as 1685, one third of Berlin's population was comprised of foreigners. From its roots as a frontier town at the wild eastern edge of the Holy Roman Empire, it has drawn successive waves of Dutchmen, Jews, Huguenots, Poles, Jacobite Scots, Silesians, and Italians. After World War II the presence of allied troops gave the city an international flavor; now it is filling with refugees from the former Soviet empire.

It is hard not to conclude that a towering, triumphal downtown business district at the center of Berlin represents an unhealthy sidestepping of historical issues as well as a blow to the livability of the city. But if neither a historical model nor a futuristic characterlessness will be good for Berlin, what alternative is there? Perhaps the best way to avoid making huge mistakes in rebuilding Berlin is to allow the market to foster as much diversity as possible, while creating some effective mechanism of popular consultation. So far, Berliners have not been allowed much of a say in the redevelopment of their city. Yet a determination to totally redesign the city, to make Berlin a quintessentially German city, remains a powerful and unresolved impulse. UR

The rebuilding of Berlin will have to incorporate symbols like this one of Karl Marx.

Harnessing Creativity in Sustainable Urban Development

by Charles Landry

Charles Landry is director of Comedia, a research and planning consultancy. He is the co-author of The Creative City, *published by Demos Books, London 1995.*

What, if anything, has creativity got to do with cities and urban sustainability? Real creativity involves thinking through a problem afresh and from first principles; it is about making the correct observation about an issue and finding an appropriate solution. Experimentation, originality, the ability to rewrite rules, to be unconventional, to visualize future trends, to discover common threads among the seemingly chaotic and disparate, and to look at situations laterally and with flexibility are all ways of encouraging innovation and generating the possibility of new ideas. But creativity is not only about progress and continual change. Creativity must also involve holding back: leaving things as they are is in some cases a courageous and creative act.

Creativity is context driven. Historically, creativity and innovation have always been the lifeblood of the city. Cities are the places that allow people to live out their ideas, needs, aspirations, and passions. Cities are trading and production centers requiring the integration of cultures and races—which leads to the development of new ideas, products, services, and institutions. Thus coping with the impacts of the industrial era required society to harness the creativity of engineers who solved public health problems by designing sewage systems, transport networks, universities, libraries, and museums.

While these talents are still necessary today, a different type of creativity is also required: being able to synthesize, connect, and gauge impacts across different spheres of life: to see holistically. A shift in urban policy is also forcing policymakers to rethink how to solve urban problems. The modern urban malaise, which includes pollution, car dependency, loss of community, and the emergence of an "underclass," is evidence that the science of modern urban planning and management needs to be reformed by including new ideas and people in the decision making process.

Urban sustainability acts as a trigger to creativity

Since the U.N. Summit on Environment and Development in Rio 1992, the notion of urban sustainability has forced decision makers to take seriously the notion that sustainability has implications for every aspect of urban life. Leicester became Britain's first Environment City in 1990. In this case, the challenge presented by sustainability set in train a process whereby the city rethought its management and resource use. Another response to urban development was in the creation of an imaginative network of over 150 interlinked public spaces in Barcelona for the 1992 Olympics: spaces created out of the interstices between existing buildings and roads. Comprising parks and squares with fountains, mosaics, and sculptures, they lightened the landscape and reduced the claustrophobia of the densely packed city.

Other cities have developed equally creative initiatives such as Milan's municipal program, which reconfigured urban timetables with the needs of working women in mind, staggering opening hours at shops to suit different lifestyle patterns. Stuttgart disguised the entrances to its undergound car parks with vegetation, to give the feeling of entering an undergound cave.

Part of the lesson of these initiatives is the independence of local authorities, who have shown a unique use of creativity. Some of their shared characteristics include the following:

- They recognized that problems could not be solved by traditional means;
- They broke rules to overcome obstacles;
- They were prepared to take risks and accept the possibility of failure;
- They encouraged self-reliance and independence to motivate people;
- They were driven by committed, original, and sometimes eccentric individuals

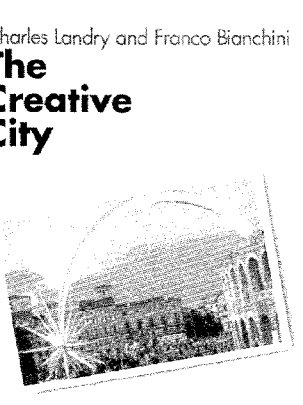
and an attitude in which opportunities, rather than obstacles, were highlighted.

In the urban context, creativity requires organizational capacity. This involves the ability to lead, to be technically competent and up-to-date, to take a long-term view, to listen and consult with others, to form partnerships with variety of interest groups, and of course to stick to an agreed-upon course of action in the face of opposition and difficulties.

The Creative City

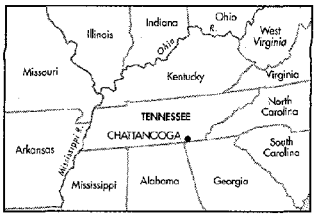
by Charles Landry and Franco Bianchini. Demos, 9 Bridewell Place, London EC4V 6AP, UK, 1995. ISBN 1898309 16 7

In the next century, the authors of this book say, cities will no longer be able to depend on manufacturing and traditional industries to survive. Instead they will need to develop creative and innovative industries and services in software, design, and culture. They will also have to learn how to apply creative solutions to their myriad problems, ranging from crime to the environment. Only if such a creative vision is allowed to surface can cities become environmentally sustainable and agreeable places to live, says the book.



The hopeful note, however, is that there are already many fascinating examples of such creative thinking in action around the world from which we can learn. For example, Southampton in the United Kingdom is making the best of an ugly urban site– a car park— by creating an ocean liner-shaped multi-storey car park, which enhances the urban landscape, and conveys a feeling of lightness. In a similar vein Perugia, a city of 100,000 inhabitants in central Italy, installed escalators leading up several hundred meters to a cathedral square on the steep rocky hill on which the city is built. The construction helped free the narrow streets of the upper city from cars and noise pollution. The idea may seem obvious and simple, but since initatives like it are rare, it is unusually courageous.

Chattanooga: Moving Toward Sustainability



by Margaret Bergen

Margaret Bergen is associate editor of The Urban Age

CHATTANOOGA. In southeast Tennessee, change comes slowly, and with change comes scepticism. It takes a tremendous amount of effort, courage, and of course bullying to force an entire community to carve out a new way of thinking; to create a new paradigm for living: in this case the practical development of the interrelationship between economic systems and natural systems. In the words of David Crockett, Chattanooga councilman, "changing the culture of an entire city is a unique opportunity to take part in history."

What is going on in Chattanooga? In the last ten years the people of this city of 152,000 have built the largest freshwater aquarium in the world, have established a successful citywide electric bus system, created an extensive river walk system, are developing a zero emissions industrial park downtown, and have plans to build a new stadium and an addition to the conference center. The general revival of downtown, with its Children's Creative Discovery Museum and renovated arts district, has all been done with a surprising and rare rapidity and consensus possible perhaps because of a small town "can do" attitude. This confirms Mayor Gene Roberts' maxim that "there is a commercial attractiveness in beauty."

Chattanooga's economic decline

Chattanooga has always been a crossroads. Located in the southeastern part of Tennessee where the cotton belt meets the mountains, its wealth was created from a strong, traditional manufacturing base. The industries that made Chattanooga great were foundries, food processing, insurance, and manufacturing of products such as carpets, soaps, and boilers for nuclear plants; and what made Chattanooga so attractive to investors was cheap land, taxes, labor, and power. Bill Sudderth, president of River Valley Partners, a for-profit public-private local business partnership involved in redevelopment, points out, however, that these factors "are not as important factors today as ten years ago because industry now looks for capital-intensive jobs not labor-intensive ones. Plants come in asking not about cost or availability of labor but about quality." Sudderth continues: "Whole areas of industrial jobs became obsolete the way agricultural jobs did in the late nineteenth century. Industry was changing, the traditional job was changing, and the number of jobs available was declining and we couldn't create more jobs." Thus, ironically, the basis of Chattanooga's economic prosperity became its downfall.

Environmental sustainability becomes engine for change

Faced with these problems, change was essential. This meant completely discarding the old ways of thinking. For Chattanooga, this meant shedding its old industrial base and traditional approach, which could not compete with the new demand for low taxes and low wages offered by other cities. Jim Vaughan, president of the Chattanooga Chamber of Commerce, states it best when he says: "The community needed to come up with a different strategy to attract new investment; we realized slowly that environmental sustainability was the key to economic development."

According to David Crockett, the city went through three phases of change. The first was the survival years of the 1960s. The second was the early 1970s flight to the suburbs, which led to urban decay, collapse of the housing stock, and the downsizing of the nuclear industry. Phase three was, according to David Crockett, " to bring life back to the city; a time for the community to revitalize itself."

The "visioning process"

The need for revitalization led to the creation of the "visioning process" which started in 1983 with Vision 2000. This was a communitywide effort to set goals for the future development of Chattanooga. The idea was to suspend the rules of planning politics and to set up a series of sessions open to the public about the future of the city. Chattanooga Venture, a nonprofit organization, was then created to ensure community participation in the follow up to the goals set by Vision 2000 and to help package ideas brought up by the visioning process. It was a neutral body whose leadership came from the business, civic, government, and philanthropic communities. It was to be an outlet for community development and was a direct response to the social and business decline evident in Chattanooga in the early 1980s. The major goals of Vision 2000 which have been accomplished to date are the revitalization of downtown, creation of more job opportunities and more affordable housing, and community involvement in public education and environmental initiatives.

In 1993 Revision 2000 set 27 new goals. Thus far, the education goals are the only ones that are now complete. Susan Tillman, director of Chattanooga Venture, says that "commitment is part of the culture," a feeling echoed by Jim Vaughan, who maintains that "this is a city where things happen and one person can make a difference."

According to Geri Spring, the coordinator of Chattanooga's Neighborhood Network, "the visioning process has led to an emerging understanding that Chattanooga really is a place of change. Everybody associated with the process believes that the environment is an engine for economic growth and that Chattanooga is becoming a model for environmental sustainability—not in an abstract way but as a living city."

Neighborhood collaboration

The visioning process has not only brought about economic changes in Chattanooga but is also having a significant social impact, particularly at the neighborhood level. Geri Spring says that "the greatest value of the visioning process is in the sharing between the different neighborhood groups and the effort to build broader support for the initiatives. The vision process helped the neighborhood level to set immediate goals. It has helped us to manage issues on a human scale that bring hope and immediate human results."

Nowhere is this more evident than in the extraordinary efforts and talents of women like Ann Wadley. She is a resident of the Harriet Taubman Projects, located on the southeast side of Chattanooga, who was determined to

continued on page 19▶

CHATTANOOGA

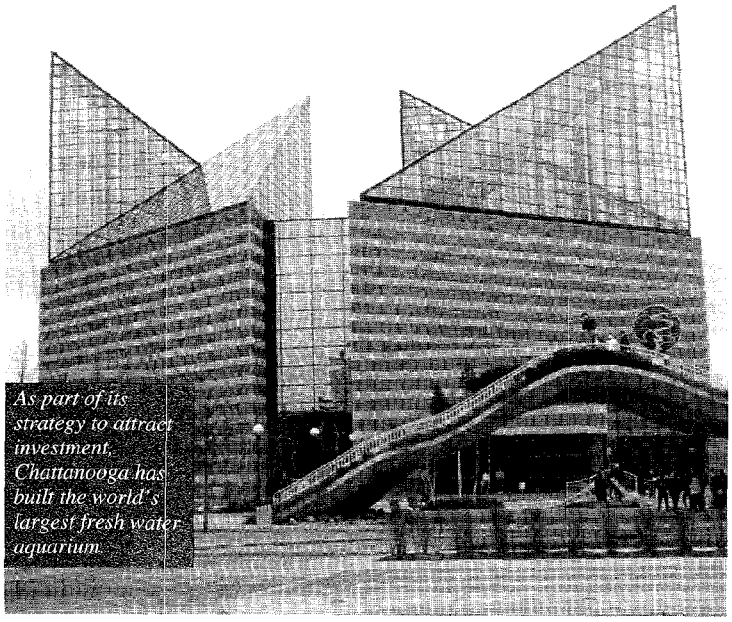
continued from page 18

"take her community back." In 1983 she and a group of women started to educate themselves about local and federal housing policies. She started using the media to highlight problems within the projects, and became a public housing activist to motivate the other residents. "The more educated we become the more powerful we become," she says. Evidence of their success is the decrease in the levels of drug abuse and in the success of the "One Room School" founded by Wadley and a group of mothers.

In 1991 Gwen Charles also decided to give something back to her community. A nurse at the University of Tennessee, she and Gwen Scott, a homemaker, started a program called the Alcohol and Drug Resistance Education Program known as DARE. Based at College Hill Court, another housing project, the aim of the program is to teach parents ways to resist drugs and alcohol and in the process teach them the necessary skills to raise their families. They teach nutrition, communication, and self control and have created a parent teacher association to improve relationships between the two groups. Requirements for joining the group are no use of alcohol or drugs. The women who first joined DARE in 1991 now belong to the advanced group, which serves as a teaching aid for women who have recently joined the beginner's group. The aim of the DARE founders is to make the program self-sustaining through the efforts of College Hill Court residents.

Economy, ecology, and equity

Economy, ecology, and equity is the motto for the new environmental city of Chattanooga. Appropriately displayed in Jim Vaughan's office is "The Ecology of Commerce" by Paul Howken and "The Geography of Nowhere" by James Howard Kunstler. When did all these changes happen is something most people ask him about. "Lots of people have been working on different pieces of the puzzle—there was really no grand plan." The mayor, Gene Roberts, dates the start of increased community activism to 1983: a year when the nuclear boiler industry started its decline, when DuPont cut 50 percent of its workforce, and the federal government was also starting to cut back on jobs in the area.



As part of its strategy to attract investment, Chattanooga has built the world's largest fresh water aquarium.

In the near future the Convention and Trade Center will be expanded and there is a proposal on the table for a new stadium to be built. Although building a stadium or improving a convention center do not immediately strike one as a way of driving the redevelopment of an area, the Chattanooga rationale is that if the best environmental structures and technologies are used, then Chattanooga will become a destination for groups interested in sustainable development and its convention center will become the center of choice. "Projects have to distinguish themselves in order to drive economic development," says Vaughan. The Convention Center with its grass roof, glass walls, and water wall will certainly attract attention. "The expansion will be a model for sustainable architecture."

Other projects planned include the development of the South Central Business District. This will include a zero-emissions industrial park: the idea behind zero emissions is to use the waste of one industry as a resource of another. It is based on the idea that waste, air, and water can all be traded: that you can make more with less, and since waste costs money, sustainability is a way to reduce cost. This is the key to bringing the traditionally conservative business community on board with the "environmental city" approach. The argument is that environmental sustainability will work not just because it is the best thing to do for the environment but that economic gain can be achieved by sustainability. Initially the problem was how to persuade the business community to see beyond the social values of this strategy and understand the economic benefits of it. The success of the citywide electric bus system has served to lay to rest the fears of even the most hardened sceptic: it has become a perfect example of economic and environmental synergy.

Jim Vaughan says that Dalton, a local carpet manufacturer, also acknowledges the no-waste anthem that is being sung so loudly in southeast Tennessee: Dalton will sell you its products and when you have finished with your carpet they will buy it back from you and grind it up into parking lot bumpers. Although new investment in the industrial park is slow, Jim Vaughan laughs and says "We worked 20 years to become an overnight sensation." However, two companies, one international, the other domestic, are in the process of bringing their plants to Chattanooga. Sudderth, when asked about the level of investment in the industrial park, points out that "Changing a city is different from financing a company: there is a thirty-year time span we are dealing with here."

Problems still exist

Chattanooga has not yet finished healing some of its wounds. When asked about the state of Chattanooga Creek, which is still under EPA administration, Vaughan says, "The community is committed to correcting the problem of the river." The existing industrial base in Chattanooga is still made up of heavy industry such as foundries and plants that manufacture nylon, yarn, and textile fibers. The city is now requiring these manufacturing industries to conduct extensive pre-treatment of their waste. Mayor Roberts states that "we still have a long way to go with environmental clean up."

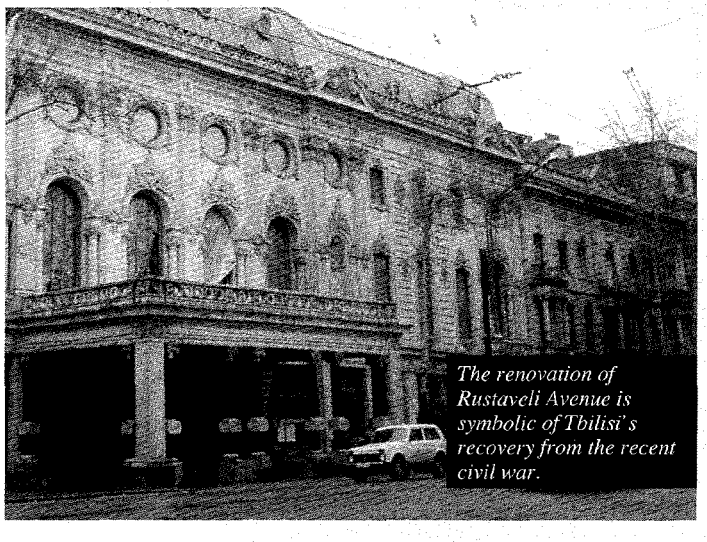
David Crockett sums up the Chattanooga story : "This is not about doing the wrong things more efficiently any more. Our strategy is to make the town more sustainable and have the city improve itself." Susan Tillman concludes, "Chattanooga sets itself up to be a model which is inspirational, not replicable."

Notebook: Tbilisi—The Fall and Rise of a Caucasus City

by Simon Sebag Montefiore

Simon Sebag Montefiore is a freelance journalist specializing in the affairs of Central Asia and other republics of the former Soviet Union. He is a regular contributor to The New Republic *and* The Times *of London. His first novel* King's Parade *was published by Penguin, London, in 1992.*

TBILISI. Despite the disasterous civil war of the last four years, the resurrection of Tbilisi, the beautiful capital of independent Georgia, is heralded by the rebuilding of its famous Rustaveli Avenue, the return to worship in its churches, and the revival of its cafe life. When I first visited Tbilisi in late 1991, the city was still the jewel of the Caucasus. My relationship with the city will always be associated with music. The Tbilisians love to sing, and no dinner is complete without groups of singers rendering some divinely romantic and tragic song.



The renovation of Rustaveli Avenue is symbolic of Tbilisi's recovery from the recent civil war.

I was staying with a Georgian family near the railway station and, guided by the daughter of the house, I discovered and fell in love with the city: its narrow cobbled streets; its houses with cascades of balconies; its pavement cafes and restaurants with their spicy vegetable dishes and red wines; the oriental style baths in the Maidan district; and the typically Georgian style of the churches with their round towers. And at the center of it all is the beloved Rustaveli Avenue, the pride of every Georgian: elegant and wide, its churches and Tsarist buildings and cafes have made it one of the most delightful boulevards in the world.

•••

Tbilisi, which Georgians pronounce "Bilisi" was first mentioned as a fortress in 368: built on a mountain beside the river Kura, the word "tbili" means warm in Georgian and it owes its position to its warm springs. Georgia was always a prize tossed between ambitious empires: Persia, the Mongols, Turkey and of course Russia. It was pillaged 40 times in its history and, during its 1400 years, was burnt to the ground 29 times. That is why today's devestation is so much part of its story and why it is reemerging as it has done so many times in the past.

Despite their subjugation to St. Petersburg, even the Georgians could not help but enjoy the wealth and cosmopolitanism of Tsarist Tbilisi. When Pushkin visited, he wrote of its fantastic charms. The brief independence of Georgia in 1918 to 1921 was ironically crushed by one of its own; Stalin, who was educated at the Tiflis Seminary in Tbilisi. But even under Stalin Tbilisi adopted the role of spoilt mistress of the Imperium: it has always been a partly oriental town — wilder, more sensual, more pleasure-loving a place than the lands of Russia to the North. The character of the Georgians and Tbilisi itself is their stoical passion, a fact that is rebuilding Tbilisi even today.

•••

During a recent trip this spring, I spent a couple of days lecturing at Tbilisi University's Modern Language Institute, which is as good a way as any to gauge the level of hope among the young. The students are pleased about the rebuilding of Tbilisi; they often attend church and believe that Georgian culture will overcome the disasters of recent years.

Yet for most people of Georgia, like Lella Ghighiashvili, 29, who works for Georgian television as a translator, "It's hard for us to really feel the improvement yet." No one earns anything but millions of coupons; the electricity goes out all the time; there is no heating. Yet there is some hope: the cafes and restaurants are re-opening; Rustaveli Avenue is being rebuilt, and people are starting to go to church again."

There are also some signs of improvements in Georgian business, some of them in dubious taste such as the emergence of a new brand of wine called "Stalin Wine" with an engraved profile of Georgia's most famous son on each label. There are now two casinos in town, the best being the Iveria, and there are two upmarket Babylon Stores. USA Today newspaper is putting together a special country report in which major Georgian commercial centers like the ports of Poti and Batumi on the Black Sea are able to pay five figure sums in U.S. dollars to advertise; quite a feat in itself. At the only Western hotel in town, the Metechi Palace Hotel, there are other encouraging signs: for the first time since 1991, the hotel is full of businessmen, journalists, U.N. personnel, and World Bankers.

•••

But of course, churchgoing and rebuilding are not of themselves enough to jump-start the economy. Most people still see Eduard Shevardnadze as the only person who can help create an efficient market economy and stem the flow of corruption. Equally, we in the West regard the "White Fox," with his cosmopolitanism and worldly understanding of Western democracy and capitalism, as the best reformer of Georgia and the potential saviour of Tbilisi. He tells me in his office: "We are fighting these problems and we are improving Tbilisi as fast as we can afford. Things are so much better than they were two years ago. Georgian culture in Tbilisi is awakening and I remain an optimist." UA

Improving Urban Environmental Performance: The Example of London

by Herbert Girardet

Herbert Girardet's film on London's "Metropolis" was shown on London's Channel 4 in June 1995. His latest book, The Gaia Atlas of Cities, New Directions for Sustainable Urban Living, *was published by Gaia Books, London, and Anchor Books, New York, in 1992. His report for* London First *on making London more resource efficient will be available shortly.*

LONDON. London is the mother of modern cities. Its water supply, sewerage disposal system, suburban railway, and underground systems, first developed in the nineteenth century, have been copied by cities the world over. Such structures, conduits for supply and disposal, make large cities possible, yet there is still little understanding of the environmental processes they set in motion.

I spent the last year exploring London's metabolism, its resource inputs and waste outputs, visiting wholesale food markets, oil refineries, gas installations, and its new main water ring. It became clear that London has much to learn about resource efficiency and circular processing; its metabolism is essentially linear, taking resources from somewhere and discharging wastes somewhere else, with little thought for sustainability.

Since the U.N. Conference on Environment and Development in Rio in 1992, the quest for sustainable development is also the quest for sustainable settlements. Agenda 21, signed by 150 nations, is dedicated to promoting sustainable human settlement development. This is a major, and unaccustomed, challenge for urban planners, architects, politicians, business people, and citizens. Cities as locations for manufacturing, trade, and finance, are above all else mobilizers of resources. How can they continue to prosper without relying on seemingly unlimited supplies from their global hinterland? How can their well-being be assured with a much more frugal use of resources?

If we take the Brundtland Commission definition of sustainable development: development that meets the needs of the present without compromising the ability of future generations to meet their own needs, we must conclude that human settlements need to work then toward ecological sustainability. For this purpose it is useful to draw up balance sheets that quantify the resource use of cities. I have recently compiled such figures for London. At the present the input-output figures for several other major cities are being drawn up. In the run-up to Habitat II they will provide a useful basis for assessing the techical and organizational measures required to improve the performance of the world's cities.

Learning from past experience

It is essential to open up communications channels between the world's cities in order to compile best practice dossiers on a wide range of issues. These include energy efficiency and renewable energy measures, public transport planning, air pollution control, health enhancement, waste and nutrient recycling, urban fringe agriculture, and the creation of green spaces. Cities appear to achieve relative well-being for their citizens with vastly varying levels of resource consumption and waste generation. How can they learn from each other about measures enhancing sustainability? How can profligate cities be restructured in both technological and organizational terms without compromising their citizen's living standards?

Demand for vast amounts of energy defines modern cities more than any other single factor. London, for instance, requires 20 million tons of oil equivalent per year, yet the know-how exists to halve that figure without compromising living standards. Greater energy efficiency can be achieved by energy supply management, such as combined heat and power systems, and solar systems, as well as by reducing demand through better building insulation, improved glazing and energy efficient household appliances. Stockholm, Helsinki, Copenhagen, Vienna, and Berlin have all reduced their energy use by a combination of such measures.

The City of London, too, has now installed its first new combined heat power system for the core of the city, supplying 30 megawatts of electricity as well as hot and cold water. This has an efficiency of 90 percent compared with 35 percent efficiency for conventional power stations. A further option now open to cities is the installation of photovoltaic cells on walls and roofs, which can make buildings self-reliant in electricity. In addition, greater reliance on public transport also has significant energy implications. Some European cities, such as Zurich and Stuttgart, have improved their energy performance by making more convenient public transport systems available to the public.

Aims and institutions

Reorganizing the way our cities function is a technological as well as an administrative issue. Active interdepartmental collaboration at the city level is crucial to promoting efficient use of resources. But not all cities have the benefit of imaginative urban administrations; London, unique among the world's great cities, has no central elected authority. London could benefit from an office of resource efficiency to generate and coordinate business and employment opportunities to achieve improved environmental performance.

Meanwhile the job creation potential of applying environmental technology is also beginning to be recognized by business, and by local and central government. This is particularly relevant at a time when unemployment in London has risen by 180 percent in four years. A joint effort by local authorities, financial institutions, commercial enterprises, and job seekers could help create suitable circumstances for improving both the city's environmental sustainability and its economic and social well-being.

Urban sustainability is being defined in cultural and social terms as ecological. Unemployment, alienation, boredom, homelessness, and crime are all part of the equation. Cities are, above all else, places for people, and the day-to-day quality of their lives is of paramount concern. A dejected, insecure, and restless urban population will not be primarily interested in the ecological viability of their city. Their concern is day-to-day survival rather than the existence of their city from century to century.

Beginning with this issue, The Urban Age *will run a bulletin board on recent activities leading up to the U.N. Conference on Human Settlements (Habitat II) to be held June 3–14, 1996, in Istanbul, Turkey.*

The Challenge of Habitat II

by Michael Cohen

Michael Cohen is senior advisor in the office of the vice president for Environmentally Sustainable Development at The World Bank

The second United Nations Conference on Human Settlements, Habitat II, to be held in Istanbul in June 1996, will be the last U.N. global conference of the twentieth century. Habitat II is intended to revisit the issues addressed in Vancouver in Habitat I in June 1976. These issues focused on housing and the pattern of human settlements within both industrialized and developing nations.

The legacy of Vancouver

The Vancouver meeting, which was held during a period of relative optimism regarding the economic prospects of developing countries, defined its mandate in narrow terms. Participating governments did not establish the linkages between the "urban" agenda and the broader spectrum of issues affecting countries such as widening economic and social disparities between and within countries, the growing importance of the environment, the role of global trade in development, and the issue of women's participation in national economic and social development. The results of the conference, therefore, were largely procedural: many ministries of physical planning and urban development were established in developing countries, and on the non-governmental side, Vancouver is remembered for its active forum, where urban practitioners participated in heated debates about low-cost housing for the poor.

The legacy of Vancouver is a modest one and it (Vancouver) has only rarely been used as a point of reference in the changing approaches to urban issues. This contrasts sharply with, for example, the strong influence of Robert McNamara's 1973 Nairobi speech to the Annual Meeting of the World Bank and the IMF, at which he launched the Bank's campaign to address the problem of rural poverty.

The changed global context

In contrast to the relative stability of the 1970s, the past 20 years have witnessed momentous change. Predominantly rural countries have experienced rapid and sustained urban growth whereby large cities have continued to expand their populations and territories and secondary cities and towns have mushroomed. Economically, the 1980s were a decade of debt and adjustment in Latin America and Africa, resulting in lowered expectations for the future. In contrast, East Asian economies prospered at unprecedented rates. Politically, the developing countries of Africa and Asia have gone through their first generation of post-independence political leadership, and Latin America has shed its military dictatorships for democratic regimes.

At the end of the 1980s, the Berlin Wall was torn down and the Soviet Union collapsed, leading to the birth of new European and Asian states that are now facing the challenge of economic transition and the construction of market economies. By 1992, the world's leaders had been alerted to the risks of global environmental deterioration at the Rio Summit and their citizens were mobilized at the local, provincial, and national levels to address these issues.

The challenge of Istanbul

Within this context of economic and political change, the challenge of Habitat II is to convince the world's political leaders of the importance of urban issues in achieving global and national development objectives. Appreciation of the role of cities must go beyond ministries of housing to reach presidents, prime ministers, and ministers of finance to assert the need for effective public policies and resources to be mobilized to address the urban agenda. Habitat II must bring together the two definitions of the word "habitat": at Vancouver in 1976 , it referred to human settlements, i.e., people in cities, and in Rio 1992 "habitat" referred to ecosystems. The Istanbul conference must integrate these two different discourses and concerns: people and natural resources.

Political leaders must be convinced of four imperatives:

1. The economic performance of cities will determine the economic prospects of nations. If urban areas already account for at least 50 percent of GDP in all countries—up to 75 percent in Latin America and more in industrialized Europe and North America—it is evident that efficient cities are critical to generating economic growth required for future prosperity.

2. Urban economic performance and environmental quality are mutually interdependent. If urban air, water, and land are degraded, it will be impossible for people to remain healthy and productive over time. There is a need to affirm "the human face of the urban environment " through a "people-centered environmentalism."

3. The reduction of poverty will be impossible without generating jobs and incomes in urban areas. This applies to both absolute poverty—decrease of incomes and calories below acceptable thresholds—as well as relative poverty and increasing inequality.

4. The crisis of governance in most countries can only be resolved through wider local participation at the urban and community level. The process of political decentralization, already advanced in some countries, must continue and transform the current weak governance of cities into more accountable and transparent processes of administration and participation.

The Habitat II Conference, therefore, must create political space for the mobilization of national, regional, local, and community actors to contribute to finding locally appropriate solutions for the problems listed above. The conference preparations and the events themselves must be broadly participatory, inclusive and not exclusive, and must highlight the best practices in urban management and problem-solving from all countries in order to promote global exchange and learning. Its resolutions must be down-to-earth and practical, thereby enhancing the credibility of global processes. And its result must be action and the improved mobilization of financial and human resources to guide the urban future.

Prep Comm II Update: April 24–May 5, 1995

On April 24, 1995, Kenya's vice president, Professor George Saitoti, officially inaugurated the second session of the Preparatory Committee (PrepCom II) in Nairobi, Kenya, which was attended by one thousand delegates. As part of a continuing global dialogue started at PrepCom I, held in Geneva in March 1994, the aim of PrepCom II was to decide the approach, elements, and outline of the main document to be prepared for the United Nations Conference on Human Settlements, known as Habitat II, to be held in Istanbul in June 1996. It was also to transform the inputs compiled from recent seminars, conferences, and meetings into workable policy recommendations for the Istanbul conference.

In the general debate, which was held over the course of five sessions, all delegations recalled their national preparations for Habitat II, including broad-based national preparatory committees, action plans, and progress reports. Many states have organized public awareness campaigns, workshops, and reviews of national housing and environmental policies.

Although delegates were somewhat disgruntled at the lack of consensus in drawing up a central document—at the end of two weeks they only had a "non-negotiated" text with which to go into PrepCom III—PrepComII has made three positive steps toward facilitating both PrepCom III and the road to Istanbul:

• *Broadening participation*—By expanding the level of participation by different constituencies, the extensive discussions held during this meeting reflect a substantive change in the attitude of governments toward inclusiveness.

• *Partnership*—Another achievement of PrepCom II was the decision to recognize the role of forming partnerships with various sectors. The secretariat fought to formally include NGOs, women's groups, and local authorities at the Istanbul Conference on an equal level with governments.

• *Redrafting process for the global plan of action*—Delegates established an open-ended drafting group to develop a global plan of action - a positive and inclusive step.

Questions for the future

However, the lead up to the conference has exposed many unresolved questions among the delegates. The major issue to be discussed and resolved before Istanbul is the question of the participants' position regarding housing rights: a major controversy which emerged in Nairobi was the American and Mexican delegates' refusal to sanction the existence of the right to adequate housing. Another question that remains open to debate is what will constitute a global plan of action. Other issues to ponder as Istanbul moves closer are: as a result of the conference will new money or even old money be used differently? And what best practices will be discovered and put to effective use?

The Second Annual World Bank Conference on Environmentally Sustainable Development "The Human Face of the Urban Environment"

In September, 1994, the World Bank held its second Annual Conference on Environmentally Sustainable Development (ESD) in Washington, D.C. Coming at the half-way point between the 1992 UNCED Summit in Rio de Janeiro and the 1996 Second United Nations Conference on Human Settlements (Habitat II), the second ESD Conference focused on drawing together the Green Agenda of natural resources, and the Brown Agenda of the urban environment.

The conference brought together mayors, government ministers, academics, professionals and non-governmental organizations from both industrialized and developing countries to consider the environmental problems that confront all cities. Plenary sessions considered the impact of the urban environment on the health, income potential, and quality of life of urban residents, especially the poor, and on local, regional, national, and international economic growth, and the role of urban environmental governance. Seven parallel sessions presented lessons of experience from cities around the world in dealing with specific environmental issues such as: air pollution, water resource conservation, wastewater, solid and hazardous wastes, land resources, inter-urban environmental networks, and the nexus between health, poverty, and the environment.

Ismail Serageldin, World Bank vice president for Environmentally Sustainable Development, opened the conference by underlining the importance of urban environmental sustainability in an increasingly urbanized world. He challenged conference participants not to debate whether cities are sustainable, but rather how to make them so. Maurice Strong, secretary general of the Rio Summit, then traced the evolution of sustainable development from its original focus on the natural world to the focus of the ESD conference, which was on the interaction of the human and built environment with the natural world. Lewis T. Preston, the late World Bank President, called for a "people-first environmentalism" that equates preservation of the environment with preservation and improvement in the quality of life of the world's people.

In his keynote address, Henry Cisneros, the U.S. Secretary of Housing and Urban Development, spoke of the effects of urban environmental degradation in American cities, especially on the urban poor. Often isolated in environmentally distressed areas, and often without access to affordable services, the poor bear the brunt of urban environmental degradation in terms of health and quality of life. However, urban environmental and social problems cannot be isolated and must be recognized as problems for the city at large. This theme, echoed by all conference paticipants, underlines one of the emerging aspects of the human face of the urban environment debate.

Traditionally, environmentally sustainable development has been considered in terms of the "triangle of sustainability," which reflects its economic, sociological, and ecological aspects. To these, the conference added a fourth dimension, environmental governance, which encompasses the role of stakeholders in environmentally sustainable development. The parallel sessions contained numerous examples of community participation in environmental service provision. And an entire session was dedicated to a panel discussion by stakeholders, including representatives from national government, local government, the business sector, and the community. These discussions resulted in a unanimous call for better communication and integration of the various stakeholders.

The conference concluded with a focus on the future. Wally N'Dow, assistant secretary general of UNCHS, spoke on the work that would be carried forward to the 1996 Habitat II Conference, of which he is secretary general. And finally, members of the international community reaffirmed their commitment to improving the urban environment and the lives of urban residents by concentrating on eradicating poverty, on enhancing international cooperation, and on investing in new, environmentally sound technologies.

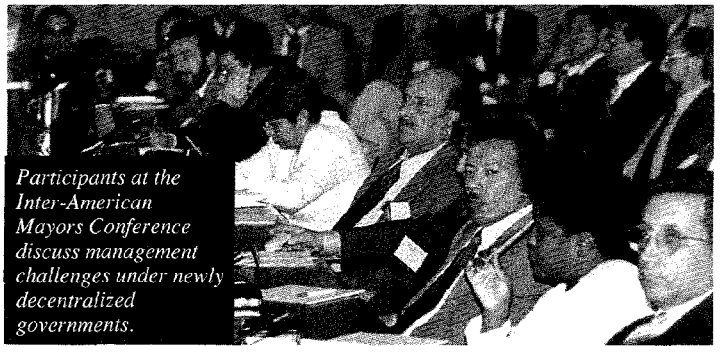
Alison Cave is an urban planner in the urban development division at the World Bank.

The First Inter-American Conference of Mayors

by Tim Campbell

Tim Campbell is the principal urban specialist in the LATAD division at the World Bank.

WASHINGTON, D.C. In November 1994 mayors and other officials from throughout Latin America and the Caribbean region arrived in Washington to participate in the first Inter-American Conference of Mayors. Convened under the sponsorship of the World Bank, the Organization of American States, the Inter-American Development Bank, the United States Agency for International Development, and the Federación de Municipios del Istmo Centroamericano (FEMICA), the conference brought together local government executives to explore the management challenges of newly decentralized and democratic governments.



Participants at the Inter-American Mayors Conference discuss management challenges under newly decentralized governments.

Two dramatic, revolutionary trends in Latin America formed the immediate backdrop to the conference, both of which have emerged only in the past ten years. One trend is the transfer of decisionmaking and spending power from central to local governments. Governments everywhere in the region—once highly centralized—have now extended power sharing arrangements to local governments, backed by automatic revenue transfers that double, and in some cases, quadruple revenues compared to recent years. Local governments from Guatemala to Argentina are now spending 10 to 20 percent of central government revenues, amounting to significant fractions of GDP.

The second trend is the transition to democracy, not just in the selection of national leaders, but in the choosing of virtually every mayor and council person in the more than 12,000 units of state (or intermediate) and local governments in Latin America and the Caribbean.

At the heart of these reforms is a new bargain of trust between central and local governments. Power sharing, fueled with shared revenues and buttressed by electoral reform, has shifted back to the local level key instruments of control that have been in the hands of central authorities for most of the post-war era. This downward shift is now affecting the grassroots levels. Local governments today feel the need to involve citizens in making choices about local infrastructure, environmental quality, primary health care, and schooling. As a result, a new generation of skills and techniques is needed to strengthen the communication between local constituents and their governments. Though central governments have abrogated many spending responsibilites, they are nevertheless nervous that new local freedoms will lead to reduced or uneven welfare in human terms, to populist promises that end in wasted resources, or to fiscal imbalance. The conference therefore sought to address some of the key issues facing policy makers and practitioners striving to empower local governments.

In the rush to share power, many governments promulgated decentralization policies without thinking through how national objectives such as health, education, and welfare, could be reconciled with decentralized powers of decisionmaking and spending in weaker subnational institutions. Nor has careful analysis of the costs of administering programs at the national level been undertaken. Mayors and other conference participants made repeated reference to the present mismatch between function and finance. They recognized that effective decentralization requires a transfer of both service functions and the resources to pay for them to state and local governments. If the transfer of either one gets too far ahead of the other, inefficiency and conflict will result.

Political, institutional, and financial factors also condition intergovernmental arrangements. Many mayors see risk in dependence on central transfers, yet most also recognize the efficiency advantages of centralized revenue collection. One presentation made a persuasive case to fill an institutional gap: intermediate levels of government—departments, provinces, states. These can play an important complementary role, capturing economies of scale, for instance. But in order to be effective, they must have the same or better democratic controls as municipalities.

Though policy control remains in the hands of central governments, other important functions—capital expansion, operations, monitoring, land use, and local economic development—are moving to municipal governments. To do these things efficiently requires a new kind of municipal work force possessing greater skills, such as understanding how to cooperate with the private sector. Countries are already shifting to a high skill mix in municipal government with concrete gains in efficiency (Bolivia and Chile were two among many cited), as well as contracting out for services such as construction, street cleaning, and even conducting household surveys.

Several mayors provided striking examples of reshaping the skills profile of municipal employees. The former mayor of La Paz reduced a work force of 6,000 by 40 percent, while increasing real wages by a factor of ten. A similar illustration can be seen in Chile. There, the professional ranks increased by a factor of seven, unskilled workers fell by half, all while the total number of employees in the nation's municipal governments shrank. More emphasis is now placed on delivering value for money to voter taxpayers.

Effective training therefore becomes much more important. Not only do mayors now benefit from higher skilled workers, they also speak more of taking greater control of how training is provided.

Popular participation in municipal affairs is crucial both for efficiency reasons and to give reality to the ideal of democracy in decision-making. All of the decentralization initiatives in Latin America have incorporated efforts to increase civic participation. However, the strategies employed have been very different. They reflect different theoretical models of community participation, as well as different country histories, cultures, and population sizes. Five different approaches were discussed—ranging from the creation of formal grassroots community organizations to the use of open town meetings, referenda, and existing community organizations. All aimed at giving priority to local investments, an indication of the importance of this area to participants.

We actively seek our developing country readers' input for this section. Our intention is to facilitate networking among developing country city managers and their constituents.

WISE-AMSTERDAM

Contact: Michel Ligthart, Secretariat Cities Network, P.O. Box 18185, 1001 ZB Amsterdam, The Netherlands; Tel: 31-20-639-2681, fax: 31-20-639-1379.

Wise-Amsterdam is a private organization based in the Netherlands that links organizations and individuals who are active on issues relating to energy, environment, and development. Wise is the secretariat of a worldwide network of eight national governing organizations compiling and distributing information among grassroots initiatives to support efforts at achieving the creation of sustainable urban environments.

To answer the need for a grassroots-based network within the field of social and ecological transformation processes in urban areas, the "Cities Network" links, complements, translates, and integrates already existing activities. An explicit aim is to stimulate linkages among emancipatory movements such as labour, women, urban poor, squatters, and the environment, striving for optimal cooperation with local authorities and research institutions to come up with answers and solutions.

ENVIRONMENTAL HEALTH PROJECT

Contact: J. Ellis Turner, Director, 1611 North Kent Street, Arlington, VA 22209; Tel: 703/247-8730, fax: 703/243-9004

EHP was initiated by the USAID in response to the growing health problems created by environmental pollution and degradation. It provides technical assistance in specialty areas of environmental health, with a focus on helping to reduce mortality and morbidity caused by diarrheal diseases, malaria, and acute respiratory infection—the three environment-related diseases that place the greatest health burden on developing countries. .

EHP had completed or initiated approximately 75 technical assistance assignments by April 4, 1995, the first anniversary of the project. In Tunisia, EHP is implementing a community-based environmental health program in peri-urban areas of two secondary cities. EHP helped Jamaica add user participation to the sanitation component of a program of squatter upgrading in two peri-urban areas in Montego Bay. In Romania, EHP is helping a copper smelter in the town of Slatna to institute low-cost preventive measures to reduce the effects of lead emissions and reduce potentially high blood lead levels in children.

CITYNET

Contact: T.S. Chana, Initiator, P.O. Box 25232, Nairobi, Kenya; Tel: 2542-560096, fax: 2542-567837.

CITYNET is a non-governmental organization network for better cities in the 21st Century. Formed to address the growing needs of the urban population, CITYNET provides a network for the exchange of ideas, experiences, best practices, and information.

A voluntary organization, CITYNET's membership is open to all people to maximize the participation from communities worldwide to initiate relevant policies, programs, projects and partnerships to enable the provision of basic services in a safe, healthy, equitable, and sustainable way for the present and future generations.

Improving the Urban Environment in Colombia

In the 1980s, Colombia achieved one of the highest GNP growth rates in Latin America and one of the most stable growth paths. Although its medium-term economic prospects continue to be favorable, Colombia faces many challenges to fulfill its development potential, including ensuring that economic growth is not achieved at the expense of environmental protection and sound natural resources management, stopping further environmental degradation, and preventing adverse impacts on public health.

Environmental issues are a priority

Acknowledging the importance of these issues, the government in December 1993 adopted an environmental framework law, Law 99, to establish a National Environmental System (SINA), and to create a new Ministry of Environment (MoE). Environmental issues have also been recognized as a priority in the National Development Plan of the Samper administration. Law 99 and the SINA are significant advances in the creation of Colombia's legal/institutional framework for environmental management.

Under this new system, the MoE is the focal point for environmental policy and intersectoral coordination at the national level. In addition, 32 Autonomous Regional Corporations (CARs) will help establish appropriate institutional/regulatory frameworks and plan, implement, monitor, and enforce environmental and natural resources management programs.

Urban environmental problems in major Colombian cities

The MoE has identified a number of legal, institutional, economic, and technical barriers to efficiently addressing urban environmental problems in the major cities of Colombia. Primary among these are the lack of adequate institutional and technical capacity in those cities that have undergone rapid and industrial growth. Also identified as critical urban problems are pollution of water resources in the industrial corridors of Bogota-Soacha, Medellin-Valle de Aburra, Cali-Yumbo, and Baranquilla-Soledad; degradation of air quality and high noise levels occurring in the industrial centers of Bogota, Cali, Medellin, and Barranquilla; and inadequate disposal of solid and hazardous wastes in Cali, Baranquilla, Medellin, and Bogota.

Project objectives

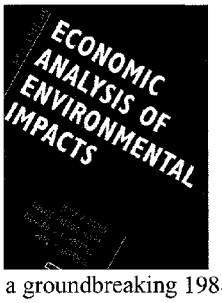
The objective of a World Bank project, which is currently under preparation, and will go to the board in FY96, is to support implementation of Colombia's National Environmental Policy by creating and strengthening environmental management institutions in the urban centers of Bogota, Cali, Medellin, and Barranquilla; promoting environmental planning in selected mid-sized cities, industrial corridors, and urban areas of special interest; and establishing those components of the National Environmental Information System that will help improve urban environmental management. The project will focus on technical assistance with the goal of establishing a sound institutional/regulatory framework at the local level and on identifying priorities for environmental mitigation.

The project will complement the country's ongoing efforts to establish a comprehensive, permanent framework to address effectively environmental issues in environmental management (the Bank has just initiated implementation of a US$39 million loan to Colombia for natural resources management). The project will also help to identify environmental priorities and generate the studies and technical analyses that will lead to future investments in improvements in basic environmental conditions in Colombia.

Economic Analysis of Environmental Impacts

by John A.Dixon, Louise Fallon Scura, Richard A. Carpenter, and Paul B. Sherman. Earthscan Publications Ltd, London, 1994. ISBN: 1-85383 185-9.

Increasingly governments, city planners, and policy makers are accepting that an important aspect of development projects is

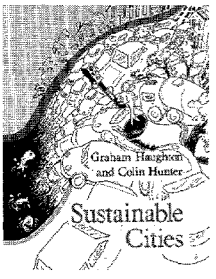


economically evaluating their environmental effects. In an updated version of a groundbreaking 1988 book, the authors describe the theory of economic analysis implicit in such an evaluation, provide details on how to measure such environmental impacts, and describe existing valuation techniques, their strengths and limitations. Case studies include: ascribing benefit values to a hill forest development project in Nepal; and evaluating the cost-effectiveness of wastewater disposal from a geothermal power plant built on Leyte Island in the Philippines.

Sustainable Cities

by Graham Haughton and Colin Hunter. Jessica Kingsley Publishers Ltd, 116 Pentonville Road, London NI9JB, England, 1994. ISBN 1-85302-234-9.

Urban environmental problems vary according to the stage of a country's development. In industrialized countries problems relating to production, housing, and basic infrastructure, such as water and electricity supplies, tend to diminish, but consumption problems, like high waste flows and traffic congestion, increase. By contrast in developing countries environmental problems tend to encompass more aspects of urban life and be more acute. They stem from production problems and under-consumption, to traffic problems and poor housing, inadequate waste disposal, and poor health services.



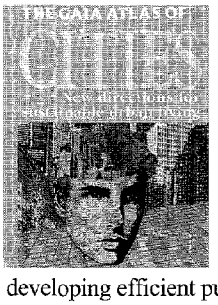
Furthermore cities that have suffered environmental problems like overcrowding, air, water, and noise pollution, and poor sanitation, are also contributing to global environmental problems.

The book examines current principles and policies for promoting sustainable development, and reviews some of the political and management decisions that will have to be taken in cities if such development is to be more than a principle and become policy. The authors suggest sustainable development should be treated on the same political plane in cities as economic and social problems.

The Gaia Atlas of Cities. New Directions for Sustainable Urban Living

by Herbert Girardet. Gaia Books Ltd, London 1992. ISBN 0-385-41915-5.

Cities are increasingly perceived as problematic: that is over-consuming, congested, and polluted. But cities need not be like this, claims the author. The know-how exists to make them function sustainably



through budgeting resources, conserving energy, developing renewable energy technology, developing efficient public transport services, and reducing and recycling waste.

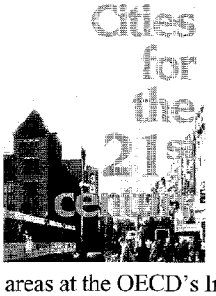
To achieve such a goal, the book says, urban dwellers and planners need to pursue a new, integrated urban development model based on ecological principles. Cities have pioneered some of the elements of this model. Stockholm has high standards of building insulation. Helsinki has one of the most advanced systems of combined heat power. Californian cities are making rapid progress with solar and wind energy, and Sao Paulo powers its buses with methane gas derived from waste.

Implementing the new urban model implies management and policy changes. Urban housing, parks, health, employment, transport, the environment, electricity, gas, waste disposal, and sewage disposal, now tend to be organized and managed seperately, the book says, whereas resources could be used much more efficiently if these various urban departments collaborated.

Cities for the 21st Century

Head of Publications Service, OECD, 2 Rue Andre Pascal 75775 Paris, Cedex 16, France, 1994.

This book takes as its starting point



the considerable diversity of opinion but also manifest consensus in many areas at the OECD's International Conference on the Economic, Social, and Environmental Problems of Cities, held in Paris in November 1992. The problems at the heart of the debates at the conference were the poverty, segregation, and distress of many urban neighborhoods; the physical degradation; and the difficulties in local adjustments to structural and economic changes that prevail in many cities.

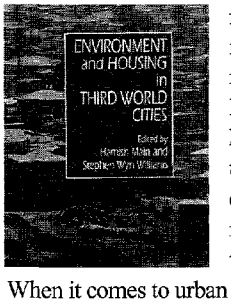
Nonetheless, the book says, a time-worn controversy between urbanists and environmentalists now seems to be fading. This is important, according to the book, as the key to a sustainable city is accepting that nature and city life are a continuum, and that human and natural systems co-exist.

Environment and Housing in Third World Cities

edited by Hamish Main and Stephen Wyn Williams. John Wile & Sons Ltd., Baffins Lane, Chichester, West Sussex PO19 IUD, England. ISBN 0-471-9483 4.

Cities now accomodate about two thirds of the total population increase in the developing world, which will amount to an additiona 600 million people during the present decade. By the year 2000, 1.9 billion people will be living in towns and cities in developing countries, and this figure could approach 3.5 billion by the year 2020. Yet the housing problems o the rapidly growing cities, and mega-cities, of Africa, Asia, and Latin America, have hardly begun to be studied. And it is not only problems of poverty, overcrowdin and homelessness, that these peop face. Often they must face natural and human environmental hazards such as floods, landslides, earthquakes, or industrial hazards and pollution.

The book also describes the particular problems of shantytown and recommends policy responses emphasizing the importance of



making improvements in low-cost housing a the environment in towns. When it comes to urban housing, and environmental problems in developing countries, often it is a question of priorities. One prime minister of a developing country sums up the dilemma: "slum dwellers are less likely to be concerned about holes in the ozon layer than they are about holes in their roofs."

Below is a selection of urban events and training courses culled from The Urban Age's *current files. We are not always able to list events more than once, given space limitations. Please refer to past issues of* The Urban Age *for additional events scheduled in 1995. Send your announcements to: The Editor,* The Urban Age, *Room S4-031, The World Bank, 1818 H Street, NW, Washington, DC 20433, USA. Fax: 202-522-3224, Internet: mmcneil@worldbank.org*

Conferences

Washington, D.C.—October 4–6, 1995. **Effective Financing of Environmentally Sustainable Development.** Contact: The World Bank Group, 1818 H Street, N.W., Washington D.C. 20433, USA. Tel: 202-473-9361, fax: 202-522-3244.

The Hague, The Netherlands—September 3–7, 1995. **The 32nd IULA World Congress—A World of Municipalities: The Local Way to Innovation in International Cooperation**. Contact: IULA World Congress, The Hague 1995, c/o Holland Organizing Centre, Parkstraat 29, 2514 JD The Hague, The Netherlands. Tel: 31-703657850, fax: 31-703645748.

Boston, Massachusetts—September 15–October 6, 1995. **Setting Tomorrow's Agenda: New Directions for Health Policy in Developing Countries.** Contact: Center for International Health, 53 Bay State Road, Boston, MA 02215-2101, USA. Tel: 617-353-4524, fax: 617-353-6330.

Education Programs and Courses

Oxford, England—An MSc/Diploma in Development Practices is being offered by the Centre for Development and Emergency Planning at Oxford Brookes University. The interdisciplinary and practice oriented postgraduate program offers a unique opportunity to combine the study of urban development and humanitarian emergencies, with courses in housing, shelter and settlements; complex emergencies and humanitarian assistance; settlement planning for refugees; and urban development and urban management planning. Contact: The Course Secretary, CENDEP, School of Architecture, Oxford Brookes University, Gipsy Lane Campus, Headington, Oxford, OX3 OBP. Tel: 01865 483413, fax: 01865 483298.

Bangkok, Thailand—The Human Settlements Development Program of the Asian Institute of Technology in Bangkok is presenting a two-week training workshop August 7–19, 1995 on the Bangkok experience in producing urban land and housing, and its lessons for other Asian cities. The workshop, designed for approximately 16 professionals, officials, and executives from Asian cities, will cover the operation of the private sector in land and housing development, and the government sector framework for these operations. Contact: Professor Ray Archer, Third Bangkok Development Workshop, Asian Institute of Technology, P.O. Box 2754, Bangkok 10501, Thailand. Tel: 66-2-516-0110, fax: 66-2-516-2126.

Helsinki, Finland—For more than twenty years, the Finnish Association of Architects has organized an annual seminar on architecture and urban planning. This year's seminar, to be held September 14–16, will focus on architecture and computers. The seminar venue, the Dipoli Congress Centre at the Campus of the Helsinki University of Technology, will offer a unique opportunity to compare Alvar Aalto's and Reima Pietilä's organic forms from the 50s and 60s, to the pioneering designs and buildings of the 90s, and to the fascinating fractal world in computers. Presentations will be made by distinguished experts and renowned practising architects from different countries. Contact: Eventra/Ms. Tiina Jansson, Yrjönkatu 11 C 16, 00120 Helskinki, Finland.

Ibadan, Nigeria The Centre for African Settlement Studies & Development (CASSAD) is organizing a number of short term training courses in 1995 as part of its efforts to enhance, through in-service training, the skill and the efficiency of officers involved in the shaping of the environment and public policy. Each course will emphasize case studies, improvement of skills, exposure to new methods and techniques, policy orientation, and practical applications. Courses to be offered include: The Establishment and Management of Land and Geographic Information Systems (June 5–9, 1995); Techniques of Environmental Impact Assessment and the Preparation of Environmental Impact Statements (September 4–9, 1995); and Organizing Communities for Self-Help Programmes: Options and Strategies (October 16 20, 1995). Contact: The Training Workshop Coordinator, Centre for African Settlement Studies & Development, No. 3, Ayo Adekunle Close, New Bodija Estate, P.O. Box 20775, U.I. Post Office, Ibadan, Nigeria. Tel: 02-8102726, fax: 02-8104536.

Rotterdam, The Netherlands—In September 1995, the Institute for Housing and Urban Development Studies and the Wageningen University will launch a new MSc course in Urban Environmental Management through the newly created Centre for the Urban Environment. The 16-month course, which will stress learning to manage the urban environment through the comparative analysis of international experience, will include a fieldwork period in the student's home country and culminate in the development and writing of an individual thesis. Contact: Centre for the Urban Environment, P.O. Box 1935, 300 BX Rotterdam, The Netherlands. Tel: 31-0-10-4021523, fax: 31-0-10-4045671.

Boston, Massachusetts—Boston University's Center for International Health announces openings in its ninth annual certificate course, Financing Health Care in Developing Countries, to be held September 14–December 8, 1995. The twelve-week course, taught in a seminar/workshop format, applies economic and financial management principles to the public and private health sectors. It offers up to 16 credits toward the Master of Public Health (MPH) degree at Boston University. Contact: Financing Health Care in Developing Countries, Center for International Health, 53 Bay State Road, Boston, MA 02215-2101, USA. Tel: 617-353-4524, fax: 617-353-6330.

Bristol, England—The University of Bristol will launch the School for Policy Studies on August 1, 1995. The school will be the largest center of its kind in Europe, and will be headed by Professor Malcolm Johnson, formerly Dean of the School of Health and Social Welfare at the Open University. The school will have the following five specialty centers: family policy and child welfare; health and social care; professional studies; socio-legal studies; and urban studies. Contact: Information Office, Senate House, Tyndall Avenue, Bristol BS8 1TH, UK. Tel: 0117-928-8088, fax: 0117-928-7777.

BOMBAY

continued from page 7

cities with vitality, diversity, and incalculable untapped human resources. Indeed, in visiting Bombay's squatter settlements one sees tremendous activity and life. It is here that the new city is being born, and where the future of its economic development lies.

"People come to Bombay because it has a certain quality found nowhere else in India," says Jamshed Kanga, a former Municipal Commissioner of Bombay who is now with the Tata Housing Development Co. The question is whether that vitality can translate into informed government, which recognizes the need for local accountability and strong city-level management.

The Bombay business community has recently launched an effort, "Bombay First," to tap into the potential for more accountable urban governance. According to Nasser Munjee, executive director of the Housing Development Finance Corporation, and one of the founders of the organization, "Urban governance mechanisms in the city have disappeared. What we are trying to do is open up the process so that the concerns of civil society are incorporated into the way the city is governed." A Bombay City Policy Research Foundation is proposed as part of Bombay First, which will create a critical mass of urban specialists—planners, economists, institutional development specialists, and others—to aid in the creation of new policies. The purpose is to improve the institutional arrangements through which the city operates.

The trigger for this new form of governance is the country's recent economic liberalization and the decentralization of authority from the central government to state governments. This decentralization of authority, however, has yet to filter down to the city level. As the city learns to deal with the enhanced power of the state government, according to Munjee, it needs a mechanism through which it can develop its own strategies and plans for growth.

The stakes for Bombay improving its urban management are high, particularly for those who inhabit its streets and who find their employment in its burgeoning economy. "Liberalization and decentralization...impose on city authorities new responsibilities for local economic development," write Nigel Harris is a recent article on Bombay for the journal *Cities*. The question now is whether Bombay can meet the challenges posed by its new growth, and whether its relative affluence can translate into a better life for all its citizens.

—Mary McNeil

Sources for Global Facts and Figures, p. 7: 1. Cities for the 21st century. OECD. page 40, paragraph 4; 2. The Gaia Atlas of Cities By Herbert Girardet. pages 182-185. The World's 40 Largest Cities.(Also in "Urban Environmental Management" by Rodney R.White, page 6. Figure 1.1); 3. Environment and Housing in Third World Cities Edited by Hamish Main and Stephen Wyn Williams. page 242. Lines 26-29; 4. Urban Environmental Management by Rodney R.White. page 119, Figure 6.1 Population Without Water Supply and Sanitation Source: Based on World Bank 1993: 91. plus lines 2-4, second paragraph, same page 119, for the last sentence " Even in OECD countries some 330 million people were not served by wastewater treatment plants in 1991"; 5. Environment and Housing in Third World Cities Edited by Hamish Main and Stephen Wyn Williams, page 244, lines 8-12; 6. The Gaia Atlas of Cities by Herbert Girardet. pages 182-185. The World's 40 Largest Cities.

LETTERS

continued from page 2

Editor:

Your issue on infrastructure illustrated well the tensions between the necessity to provide appropriate levels of infrastructure and guaranteeing its efficient functioning. With the developing nations suffering from rural-urban migration problems such as in the northwest area of Cameroon where I come from, the absence of basic infrastructure, improper maintenance of existing infrastructure stock, and the neglect of infrastructural planning in rural areas are leading to crisis. Your suggestion that the comunity participate in the planning and provision of infrastructure is a good one; for example, a water supply system developed and maintained by my village has survived because it is maintained by the community. A well-planned infrastructure in both rural and urban areas will help increase all nations' environmental wel being.

Nwachan Jacob Ngo
Samaru-Zar
Kaduna State, Niger

Editor:

I found your last issue, Information and the City, to be of great relevance. In order to enhance the total health of the city and improve its management through the informed participation of its people, local governments need to facilitate the flow of information about their activities and proposals. It is also important to enrich the flow of information and exchange of ideas between and among urban resident In Nigeria the Nigeria Urban Forum has been set up to do just that: its aim is to promote dialogue between its constituents who include producers, institutional operators, infrastructure providers, governmen agencies, and social mobilizers. They discuss issues such as how to improve opportunities for jobs, income, and quality of life. The Urban Forum will increase the opportunity for a free flow of information among different categories of urban actors; this should help the evolution of a shared vision for the future of our cities.

Mariam Yunus
Fellow of the Nigerian Institute for Town Planne
Lagos, Niger

Photo credits: page 1: Neil Cooper/Panos Pictures; page 7: Achinto/Panos Pictures; page 8: Chreod, Inc.; page 10: A. Edwards; page 13: Wachira Kigotho; page 15: Aykut Karaman; page 16: ©Micheal J. O'Brien/ Panos Pictures; page 19: Margaret Bergen; page 20: Simon Sebag Montefiore; page 24: OAS.

Next Issue

The next issue of *The Urban Age* will be on Financing How Cities Work. We look forward to receiving your comments and thoughts on this upcoming issue.

To receive *The Urban Age*, please fill out the information below and return to:
The Editor, *The Urban Age* Rm S4-031, The World Bank Group, 1818 H St. NW, Washington, D.C. 20433

NAME _____

OCCUPATION _____

ORGANIZATION _____

ADDRESS _____

_____

☐ English
☐ French
☐ Spanish

A fee of $20.00 per year will be charged to developed country subscribers.

The Urban Age is printed by ***Automated Graphic Systems, Inc.***, on recycled paper using soy-based inks.

The Urban Age is published four times a year and is available to developing country subscribers free of charge. Developed country subscribers are charged US$20.00 annually. Editorial offices are located at Room S4-031, The World Bank Group, 1818 H Street, NW, Washington, D.C. 20433, USA. Fax: 202-522-3224, Internet: mmcneil@worldbank.org