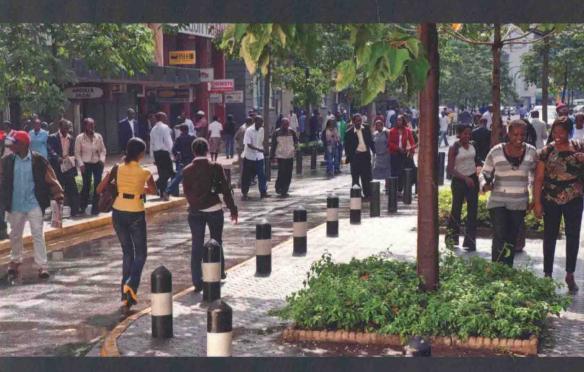


# THE URBAN TRANSFORMATION

Health, shelter and climate change



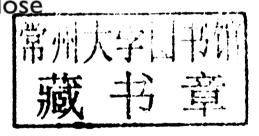
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### The Urban Transformation

For the first time in history, half of the world's population lives in urban areas and it is expected that, by 2050, that figure will rise to above two-thirds. A large proportion of this urban growth will be taking place in the cities of the developing world, where the provision of adequate health, shelter, water and sanitation and climate change adaptation efforts for rapidly-growing urban populations will be an urgent priority. This transition to an urban world could be a negative transformation; but, if well-planned, it could also offer an unprecedented opportunity to improve the lives of some of the world's poorest people.

This volume brings together some of the world's foremost experts in urban development with the aim of approaching these issues as an opportunity for real positive change. The chapters focus on three strategically critical aspects of this transformation:

- · public health
- shelter, water and sanitation
- climate change adaptation.

These are considered using an integrated approach that takes account of the many different sectors and stakeholders involved, and always in terms of the solutions rather than the problems. The book offers a blueprint for action in these sectors and will be of great interest to academics and policymakers in all aspects of urban development and planning.

Elliott D. Sclar is Director of the Center for Sustainable Urban Development (CSUD) at the Earth Institute at Columbia University and Professor of Urban Planning in the university's Graduate School of Architecture, Planning and Preservation.

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This book would not have been possible without the visionary leadership and support of the Rockefeller Foundation. We particularly wish to thank Judith Rodin, the Foundation's President, and Darren Walker, former Vice-President of Foundation Initiatives. They understood the importance of taking a global approach to the urban challenge. We also wish to thank all of the contributors for lending their expert knowledge and experience to this volume. The Center for Sustainable Urban Development, where we are based, is one of the eight global centers of excellence supported by the Volvo Research and Education Foundations.

Elliott Sclar and Nicole Volavka-Close Center for Sustainable Urban Development Earth Institute, Columbia University New York, New York May 15, 2012

## Abbreviations and acronyms

AAG	Adaptation Assessment Guidebook	COP17	17th Conference of the Par- ties to the United Nations
ACHR	Asian Coalition for Housing and Rights		Framework Convention on Climate Change
ACTED	Agency for Technical Cooperation and Development, France	CRS CVCCCM	Catholic Relief Services Mexico City's Virtual Center on Climate Change
ADB	Asian Development Bank	DAC	Development Assistance
AFCSR	Asian Forum on Corporate		Committee
	Social Responsibility	DEP	Department of Environmen-
AHC	Alliance for Healthy Cities		tal Protection, US
AIDF	Asian Infectious Disease	DHS	Demographic and Health
	Project		Survey
BARR	Building assessment and	DRR	disaster risk reduction
	rubbish removal	FAP	flexible adaptation
CapEx	capital expenditures	supervisor of the	pathways
CapManEx	capital maintenance	FEMA	Federal Emergency Manage-
	expenditures		ment Agency, US
CBO	community-based	FHC	family health center
and a series	organization	FUPROVI	Foundation for Housing
CLACC	Capacity Strengthening in	212	Promotion, Costa Rica
	Least Developed Countries	GAR	global assessment report
	for Adaptation to Climate	GDP	gross domestic product
Service (	Change	GHG	greenhouse gas
CMP	Community Mortgage Program	GIS	geographic information systems
CMU	contract management unit	GLAAS	Global Annual Assessment
CNG	compressed natural gas		of Sanitation and Drinking
CO,	carbon dioxide		Water
CoĆ	cost of capital	GNI	gross national income
CODI	Community Organization	GNP	gross national product
	Development Institute,	GRET	Groupe de Recherche et
	Thailand		d'Echanges Technologiques,
COMFORÇA	a committee intended to		France
	give citizens a voice at the	HCP	Healthy City Project
	municipal level in the par-	HDI	Human Development
	ticipatory budgeting process,		Index
	Brazil		

HUDCO	Housing and Urban Devel-	NHB	National Housing Bank,
HVAC	opment Corporation, India heating, ventilation and air	NHMFC	India National Home Mortgage
TOTOL	conditioning		Finance Corporation,
ICICI	Industrial Credit and Invest- ment Corporation of India	NOx	Philippines nitrogen oxide
	Bank	NPCC	New York City Panel on
ICLEI	International Council for	NICC	Climate Change
TOLLI	Local Environmental Initia-	NYCDEP	New York City Department
	tives (Local Governments	02 22	of Environmental Protection
	for Sustainability)	O&M	operations and maintenance
IFI	international financial	ODA	official development
	institution		assistance
ILO	International Labour	OECD	Organisation for Economic
m m	Organization		Co-operation and
IMR IPCC	infant mortality rate	ONEA	Development National Water and Sanita-
IPCC	Intergovernmental Panel on Climate Change	ONEA	tion Office, Burkina Faso
JMP	Joint Monitoring Program	OPP	Orangi Pilot Project,
JNNURM	Jawaharlal Nehru National	OH	Pakistan
jiwom	Urban Renewal Mission,	OPP-RTI	Orangi Pilot Project
	India		Research and Training Insti-
KIP	Kampung Improvement		tute (OPP-RTI) of Karachi
	Programme, Indonesia	PHP	People's Housing Process,
LDCs	least developed countries		South Africa
LECZ	low-elevation coastal zone	<b>PLANASA</b>	National Water Supply and
LWUA	Local Water Utilities Admin-		Sanitation System, Brazil
	istration, Philippines	PPAG	Plano Plurianual de Ação
MAUC	Mongolian Association of		Governamental, multi-year
MDE	Urban Centres	PPI	plan, Brazil
MDF	Municipal Development Fund	PRODEL	public-private infrastructure Local Development Pro-
MDGs	Millennium Development	PRODEL	gramme, Nicaragua
MDGs	Goals of the UN	RBI	Reserve Bank of India
MEC	Metropolitan East Coast	RWSA	Rural Waterworks and
3	Regional Assessment of		Sanitation Association
	Climate Variability and	SDFN	Shack Dwellers Federation
	Change, USA		of Namibia
MFI	microfinance institution	SDI	Shack/Slum Dwellers Inter-
MIREP	mini drinking water net-		national
	works programme (French	SEWA	Self-Employed Women's
A C. TT	acronym)	COEFFE	Association, India
MoU	memorandum of under-	SOFELES	Sociedades Financieras de
MRGO	standing Mississippi River Gulf	SOx	Objeto Limitado, Mexico sulphur oxide
MIKGO	Outlet, US	SPARC	Society for the Promotion
NBFC	non-banking financial	STINC	of Area Resources Centres,
- 15A B	company		India
NGO	non-governmental	SSIP	small-scale independent
	organization		provider
NHAG	Namibian Housing Action	Sida	Swedish International Devel-
	Group		opment Cooperation Agency

SUD-Net	Sustainable Urban Develop-	UNEP	United Nations Environment
	ment Network		Programme
TDR	transferable development	UNFCCC	United Nations Framework
	rights		Convention on Climate
UCDO	Urban Community Develop-		Change
	ment Office	UNISDR	United Nations International
UCLG	United Cities and Local		Strategy for Disaster
	Governments		Reduction
UHI	urban heat island	UQLI	urban quality of life index
UHLP	Unified Home Lending	WHO	World Health Organization
	Program, Philippines	WSS	water and sanitation
UN	United Nations		systems
UNDP	United Nations Develop-		
	ment Programme		

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