



The work presented in this book is part of a larger research agenda of the Global Urban Futures Project (GUFP) at The New School. The research and analysis is a collective effort by students and faculty of the Milano School of International Affairs, Management, and Urban Policy at The New School.

CORE TEAM: HABITAT COMMITMENT PROJECT

Michelle DePass

Dean of the Milano School

Michael A Cohen

Professor of International Affairs

Margarita Gutman

Professor of Urban Studies and International Affairs

Lena Simet

Coordinator of the GUFP

PhD Student in Public and Urban Policy

Maria Carrizosa

Coordinator of the OLA

PhD Student in Public and Urban Policy

Crista Carter

MS in Urban Policy Analysis and Management '16

Melissa Reanne De la Cruz

Master Student in International Affairs

Martha Susana Jaimes

PhD Student in Public and Urban Policy

Achilles Kallergis

PhD Candidate in Public and Urban Policy

Younghyun Kim

Master Student in International Affairs

David López García

PhD Student in Public and Urban Policy

Bart Orr

PhD Student in Public and Urban Policy

Justin Roberts

Master Student in International Affairs

Georgina Vasquez de los Reves

Master Student in International Affairs

GLOBAL URBAN FUTURES TEAM MEMBERS

William Morrish

Professor of Urban Ecologies, Parsons School of Design **Robert Buckley**

Senior Fellow

Senior Fellow

Ana Baptista

Interim Chair and Assistant Professor of Environmental Policy and Sustainability Management

Shagun Mehrotra

Associate Professor of Environmental Policy and Sustainability Management

Gulelat Kebede

Part-time Lecturer in International Affairs

AUTHORS

Michael Cohen

Bart Orr (principal author)

Lena Simet

Crista Carter (South Asia), Melissa De la Cruz (South Asia, East Asia & Pacific, Sub-Saharan Africa), Martha Susana Jaimes (Latin America and Caribbean), Younghyun Kim (Europe & Central Asia), David López García (Middle East & North Africa), Justin Roberts (Europe & Central Asia)

DESIGN

Cristina Handal Gonzalez

PhD Student in Public and Urban Policy

Nadine Rachid

MS in Design and Urban Ecologies '16

GENDER ASSESSMENT

Caroline Moser, Lena Simet, Melissa De la Cruz, Younghyun Kim, Justin Roberts

LATIN AMERICA QUALITATIVE COUNTRY ASSESSMENTS

Maria Carrizosa (Chapter Author), Andrea Catenazzi (Argentina), Fernando Carrión (Ecuador), Edesio Fernandes (Brazil), Eduardo Reese (Argentina), Alfredo Rodríguez (Chile), Paula Rodríguez (Chile), Jorge Torres (Colombia), Alicia Ziccardi (Mexico)

FINANCIAL SUPPORT

Ford Foundation

Julien J. Studley Faculty Research Fund at The New School

DISCLAIMER

The views presented in this book are those of the author(s) and do not necessarily represent the views of The New School.

Photographs used throughout this document were taken by New School students and staff, unless otherwise noted.

Readers are encouraged to quote or reproduce material for non-commercial use. For online use, please link to the original resource on the Global Urban Futures website. As copyright holder, GUFP requests due acknowledgement. Artists and photographers retain ownership and all rights to their original photographs and designs.

ISBN 978-0-692-75573-0 © Global Urban Futures Project 2016





TABLE OF CONTENTS

- **04** Foreword
- **06** The Global Urban Futures Project
- **06** Introduction
- **09** The Habitat Commitment Index (HCI)
- 12 Findings
 - **12** Global Overview
 - **16** Findings by Region
 - **16** East Asia & Pacific
 - 19 Europe & Central Asia
 - **21** Latin America & Caribbean
 - 25 Middle East & North Africa
 - **28** South Asia
 - 31 Sub-Saharan Africa
 - 34 Gender and the HCI
- 37 Qualitative Analysis
- **44** Conclusion
- 46 Appendix: Methodology

FOREWORD

Michael Cohen



The motivation for writing this book for Habitat III comes from a concern that the framing of commitments in a New Urban Agenda (NUA) must reflect

knowledge about the degree of fulfillment of commitments made by governments at the 1996 Habitat II Conference.

This issue became evident during the Second Preparatory Commission meeting in Nairobi in April 2015 during a session of presentations by the United Nations Regional Economic Commissions when a representative of the Habitat International Coalition asked whether the reports of the commissions would assess the degree of fulfillment of national commitments made in 1996. Regional representatives answered that no such assessment would be included in the reports; each government has to undertake an evaluation. Yet, few believed that most national governments would critically assess their own performance.

These discussions led the Global Urban Futures Project (GUF) and the Observatory on Latin America (OLA) of The Milano School of The New School University in New York to undertake different forms of assessment of the fulfillment of Habitat II commitments. The GUF, a project supported by the Ford Foundation and



the Julien Studley Faculty Research Fund at The New School, created the Habitat Commitment Index (HCI) presented in this book. In parallel has been a qualitative assessment of the experiences of six Latin American countries: Argentina, Brazil, Chile, Colombia, Ecuador, and Mexico. Wellknown urban scholars and practitioners in each country were commissioned by the OLA to prepare assessments. These reports, supported by financing from the Ford Foundation, were discussed at a workshop and public conference on July 4-5, 2016, held in Buenos Aires at the offices of the CAF- Development Bank of Latin America, and the Facultad de Arquitectura, Diseño, y Urbanismo of the Universidad de Buenos Aires and later in New York at the Ford Foundation on September 15, 2016. These events were generously supported by the CAF. A summary of the six reports is included in this book.

The findings of these two forms of assessment, quantitative and qualitative,

are complementary and demonstrate that the commitments made in 1996 have not been significantly fulfilled. In some countries, there is almost no evidence that Habitat II had any influence at all on either urban policy or urban development. In others, it is apparent that the debates in Istanbul substantively affected policy formulation and decisions.

Four major findings stand out from these two assessments:

- National economic growth does not automatically result in improved urban conditions.
- There is no relationship between inequality levels and economic growth.
- Policy reform and institutional development both prove to be fragile in many countries.
- Data and evidence of the impacts of national policies on cities are difficult to

find. There are severe limitations on the availability of urban data at the national level.

These limitations underline the importance of careful drafting and consultation among member countries about the commitments to be included in the NUA. The latest version of the New Urban Agenda mentions the word "commit" more than 50 times, yet at no place in its many pages are there numerical targets. This makes accountability extremely difficult, as in the case of the slum target in the Millennium Development Goals, where the words used in the definition of the slum target could be interpreted in many different ways.

Both assessments undertaken by The New School suggest an urgent need to:

- Establish clear targets and indicators of progress
- Establish rigorous monitoring systems at the global, national, and urban levels
- Hold periodic public reviews of the progress of countries and cities in meeting the commitments made in the NUA
- Design feedback loops at the national and urban levels so that monitoring results can be used to strengthen policy reform and implementation processes
- Assure that this process is transparent and comparable across countries and cities so that findings can be used to encourage

sustained improvement in performance.

Commitments should not only be about the "what", they should also tackle the "how" — how can countries and cities, through their national and urban governments, undertake a more focused and successful effort in achieving these new urban goals? The assessments presented in this book offer an opportunity for low performing countries to identify policies and action agendas that can lead to a more successful achievement of the goals of the NUA.

It is hoped that this book will contribute to that process by clearly suggesting to national and city governments, international organizations, and civil society that the nature of commitments matter. Formulating ambitious and realistic commitments is an indispensable first step towards achieving real progress in improving the lives of billions of city residents around the world.

Michael Cohen

Professor of International Affairs

Michael a. loka

THE GLOBAL URBAN FUTURES PROJECT

The Habitat Commitment Index (HCI) is a product of the Global Urban Futures Project (GUFP), a learning network of scholars and activists who are changing the conversation about urban policy. The GUFP highlights the major challenges facing cities around the world—rising inequality, uneven growth, and climate change.

We believe that cities are central to these problems, but also hold the key to their solutions. We encourage an approach to urban issues that considers the economy, the environment, and society jointly—not separately—and fosters ambitious new ideas and solutions. With partners from civil society and policy circles, we are fostering debate and contributing evidence to the development of the New Urban Agenda, including the Sustainable Development Goals, COP 21 and Habitat III.

The Global Urban Futures Project created the Habitat Commitment Index to bring a comprehensive assessment of the Habitat Agenda from 1996 to the discussion as the New Urban Agenda is being drafted and debated.

INTRODUCTION

TOWARDS HABITAT III: THE ROAD FROM VANCOUVER TO QUITO

In 1976, the United Nations General



Assembly convened the First United Nations Conference on Human Settlements (Habitat I) in Vancouver, Canada, Governments had just begun to recognize the consequences of rapid urbanization and the need for sustainable urban development, particularly in the developing world. The past decades had seen a massive surge in urbanization driven by rural poverty, growing urban economies, reduced infant mortality, and longer lifespans. Along with this shift, the negative impacts of rapid, unplanned urbanization were becoming more apparent, as urban slums and evictions became commonplace in the Global South, while cities of the Global North struggled with urban sprawl and decaying inner cities.

While Habitat I was notable for bringing urban issues to an international stage for the first time, it was not without criticisms—the momentum following Habitat I focused on housing supply, often at a very technical level, and on work to be undertaken by national governments with local-level

authorities largely left out of the discussion. Civil society groups were also left out of the discussion, despite their intimate understandings of the day-to-day impacts of housing policies.¹

The Second United Nations Conference on Human Settlements (Habitat II) took place in Istanbul, Turkey, in 1996. Habitat II was notable for being the first UN conference to invite NGOs and civil society organizations to provide input and participate in drafting recommendations. The result of the conference was the Habitat Agenda—241 paragraphs containing over 600 recommendations meant to guide UN policy regarding cities for the following two decades, organized around five central objectives: adequate shelter for all, security of tenure throughout the developing world. support for vulnerable groups and women, adequate and equitable access to services, and promotion of decentralization and good urban governance.

HABITAT II

Despite its successes in bringing urban issues to the global stage and the unprecedented inclusion of a broad range of stakeholders, Habitat II has been criticized for failing to produce a lasting and meaningful impact on urban policy. The Habitat Agenda was ambitious, but lacked priorities, metrics, or any system for evaluating progress. David Satterthwaite, in the February 1997 meeting at the Woodrow Wilson International Center for Scholars in Washington, stated that:

"Although the commitment to tackle poverty and its various manifestations is clearly stated, the documents do not set out realistic means to do so - or to address poverty's underlying causes. This is a weakness they share with most other international UN conferences, which achieved little in setting up effective international mechanisms to promote progress toward the commitments made. This is a weakness that Habitat II also shares with its predecessor, the first UN Conference on Human Settlements. as there was little attempt to evaluate the performance of governments in regard to the Recommendations for National Action that they had formally endorsed at that earlier Conference in 1976."2

Satterthwaite noted at the time that "there is no provision for the kind of independent assessment and monitoring that will hold governments accountable if they fail to implement the recommendations they have endorsed."³

In a Report to the General Assembly on

progress towards the Habitat II agenda in July 2014, UN-Habitat Executive Director Dr. Joan Clos reported, "Urbanization has brought growth and development...[but] has been unable to respond to many existing and emerging challenges such as: urban sprawl, congestion, pollution, emission of greenhouse gases, emerging urban poverty, segregation, increasing inequalities and other negative externalities." Later that year, at the first Preparatory Committee for Habitat III, Dr. Clos highlighted six new challenges and issues that have emerged since Habitat II in 1996.

- **1.** Cities now represent more than half of the world's population.
- 2. Urban expansion in many developing countries has often been characterized by informality and unauthorized settlements. However, the core of this problem is lack of protection of the public space and availability of accessible buildable plots.
- **3.** While high population growth remains a concern in the least developed countries, countries in many other parts of the world are grappling with slower or declining population growth, with developing regions and countries experiencing a significant increase in the proportion of young people in their populations.
- **4.** Inequality has become a universal concern. Differences in access to opportunity, income, consumption, location, information and technology are now the norm, not the exception. Developing countries also face the issue of slums, which continue to reinforce the aforementioned inequalities.

- **5.** An increasing number of urban residents in developed countries experience poverty or social exclusion.
- **6.** Cities are responsible for as much as 70 % of the world's carbon emissions. A well planned and managed urbanization is a prerequisite for reduction in carbon emissions and for increased resilience to climate related disasters.

The World Cities Report 2016 categorizes these issues facing cities since Habitat II into two groups: persistent and emerging challenges. The persistent issues, which were recognized during the time of Habitat II but remain unresolved or have exacerbated. include informal and underserved settlements, and in some areas, increasing concentrations of poverty. Emerging, and often interrelated, urban issues include: climate change; involuntary migration as a result of conflict, such as the Syrian civil war: and the issues of exclusion and inequality, as today 75 percent of the world's cities have higher levels of inequality than two decades ago.6

Inequality, in particular, has become a crisis in cities of both developed and developing countries, from the "Occupy" movements in New York and Istanbul, protests over police violence in Ferguson, and the more recent "Brexit" decision in the United Kingdom, which many attributed to inequality between London's finance sector and the stagnating wages of former industrial areas. The World Cities Report 2016 captures the extent of wealth, inequality, and exclusion of cities today in stating "never before have so many newcomers been attracted to these

concentrations of wealth and productive capacity than today—nor have these resources been so inequitably distributed that the 'urban divide' between rich and poor has never looked so wide."8

In the period since Habitat II, cities have become centers of unprecedented wealth and prosperity, but in many cases few have benefited from this increased prosperity. As Habitat III approaches and a New Urban Agenda (NUA) is articulated that reflects Sustainable Development Goal 11—to make cities inclusive, safe, sustainable, and resilient—the Global Urban Futures Project has recognized the need not only for an assessment of the previous urban agenda, but an assessment process that takes into account the differing levels of resources available to countries. The Habitat Commitment Index, rather than comparing absolute outcomes between countries of disparate levels of economic development, aims to measure how well countries have used the resources available to them to meet the commitments set forth at Habitat II.

By assessing progress made toward the Habitat II commitments, the Habitat Commitment Index aims not only to inform the Habitat III process, but to highlight the limitations of relying on economic growth alone in meeting urban development goals and better identify opportunities where policy interventions may be needed.

8 UN Habitat, "World Cities Report 2016," UN-Habitat, p. 72

¹ Citiscope, "What's the history of the Habitat process?," Citiscope. Accessed July 8, 2016. http://citiscope.org/habitatIII/explainer/2015/06/ whats-history-habitat-process

² David Satterthwaite, "Can UN Conferences Promote Poverty Reduction? A review of the Istanbul Declaration and the Habitat Agenda" (paper presented at "Examining the Legacy of Habitat II", at the Woodrow Wilson International Center for Scholars, Washington, D.C., February 1997)
³ Ibid., p.19

⁴ Report of the Secretary General of the Conference, "Progress to date in the implementation of the outcomes of the second United Nations Conference on Human Settlements (Habitat II) and identification of new and emerging challenges on sustainable urban development" Preparatory Committee for the United Nations Conference on Housing and Sustainable Urban Development (Habitat III), New York, September 17 & 18, 2014.
⁵ Joan Clos, "Statement on the Preparations for the Conference and Progress to date in the implementation of the outcomes of Habitat II and identification of new and emerging challenge on sustainable urban development," Habitat III PrepCom1, New York, 17 September 2-14
⁶ UN Habitat, "World Cities Report 2016," *UN-Habitat*, p. 69
⁷ Craig Calhoun, "Brexit is a Mutiny Against the Cosmopolitan Elite," *Huffington Post*, June 28, 2016, Accessed July 8, 2016. http://www.huffingtonpost.com/craig-calhoun/brexit-mutiny-elites b 10690654.html

THE HABITAT COMMITMENT INDEX:

A composite score of the performance of 15 indicators at the countrylevel that are essential to urban wellbeing, weighted by per capita GDP.

As UN member states prepare to meet in Quito this fall to agree on a New Urban Agenda (NUA) at Habitat III, it is important to scrutinize the previous urban agenda and assess how effective it has been. Unfortunately, there has been little effort so far to thoroughly gauge the progress made toward meeting the objectives agreed upon in the previous agenda from the 1996 Habitat II conference in Istanbul. Given the economic growth of the past two decades, how well have countries used their resources to meet the commitments of the Habitat II agenda?

To answer this question, the Global Urban Futures Project has developed the Habitat Commitment Index (HCI)—a way of measuring country performance on a set of indicators that takes per capita income levels into account to gauge progress over time.

While socioeconomic indicators, such as measures of poverty, access to basic services, and education, can provide a meaningful representation of the well-being of individuals, the goal of the HCl is to look not only at well-being, but at levels



of commitment on the part of national governments to meeting the goals and objectives set forth at Habitat II. At the time of Habitat II, countries began at different starting points in terms of urban development and with vastly different levels of resources available to them. In the time period between Habitat II to present, some countries have experienced rapid economic growth, while others have suffered from slow growth or economic stagnation. The HCI creates an index that measures progress on socioeconomic indicators in light of the resources, as measured by per capita GDP, that have been available to countries during this period.

Recognizing the problem of comparing outcomes between countries with vastly different resources available to them, the Global Urban Futures Project (GUFP) team sought to create an index that would judge country performance not by absolute achievement level, but against the maximum level achieved historically by countries with

similar income levels. Using the Social and Economic Rights Fulfillment (SERF) method developed by Fukuda-Parr et al.¹, the HCl established predicted performance levels by income for six categories: *Infrastructure*, *Employment*, *Poverty*, *Sustainability*, *Gender*, and *Institutional Capacity*.

The HCI's rescaled scores based on predicted performance offer a new perspective on urban development. For example, in 1996 only 37% of Burundi's urban population had access to electricity. while in Belize over 96% had access to electricity. However, Belize's per capita GDP at that time was almost ten times that of Burundi. Using the HCI's scoring based on historical data, Burundi was actually performing at around 96% of what was possible. While the raw numbers put Belize and Burundi at opposite ends of the spectrum in terms of urban electricity provision in 1996, their HCI scores are nearly equivalent—meaning that based on their resources, Burundi was performing

about as well as could have been expected in terms of urban electricity access.

Likewise, the level of access to improved urban sanitation was roughly the same for Peru and Vietnam in 1996, at 73.3% and 72% respectively. However, at that time Vietnam had a per capita GDP (PPP, 2011 International Dollars) of \$2,197, while Peru was significantly higher at \$6,240. Based on the HCI's analysis using the achievement possibility frontier derived from historical data, Vietnam received a score of 92.6 out of 100 in terms of its achievement for access to improved urban sanitation relative to its capacity. Meanwhile, Peru's capacityadjusted achievement on the indicator was more modest, at 80.6 out of 100.

Identifying Commitments and Selecting Indicators

Based on a detailed review of the Istanbul Declaration and related documents from Habitat II, the Global Urban Futures Project identified seven commitment categories and several goals that had been agreed upon and which would form the basis for the HCL evaluation, them being:

1. Adequate shelter for all

We reaffirm our commitment to the full and progressive realization of the right to adequate housing, as provided for in international instruments.

2. Sustainable human settlements

We commit ourselves to the goal of sustainable human settlements in an

urbanizing world by developing societies that will make efficient use of resources within the carrying capacity of ecosystems.

3. Enablement and participation

We commit ourselves to the strategy of enabling all key actors in the public, private and community sectors to play an effective role - at the national, state/provincial, metropolitan and local levels - in human settlements and shelter development.

4. Gender equality

We commit ourselves to the goal of gender equality in human settlements development.

5. Financing shelter and human settlements

(...) we commit ourselves to strengthening existing financial mechanisms and, where appropriate, developing innovative approaches for financing the implementation of the Habitat Agenda (...)

6. International cooperation

We commit ourselves - in the interests of international peace, security, justice and stability - to enhancing international cooperation and partnerships that will assist in the implementation of national plans of action and the global plan of action and in the attainment of the goals of the Habitat Agenda.

7. Assessing progress

We commit ourselves to observing and implementing the Habitat Agenda as a guide for action within our countries and will monitor progress towards that goal.

Goals and Principles

- 1. Equitable human settlements
- 2. The eradication of poverty
- 3. Sustainable development
- 4. Quality of life
- 5. The family
- 6. All people have rights
- 7. Partnerships among countries
- 8. Solidarity with those belonging to disadvantaged and vulnerable groups
- 9. Safeguarding the interests of present and future generations
- 10. Health

The HCI seeks to analyze the progress made on the commitments, goals, and principles of the 1996 Habitat Agenda by dividing them into six broad categories, referred to as dimensions throughout the study. The six dimensions of the HCI are: Infrastructure. Povertv. Employment. Sustainability, Institutional Capacity, and Gender.

Choosing Indicators: Challenges to Collecting Data

Moving from identifying the commitments of Habitat II to creating a list of usable indicators for the HCI presented several challenges. The first, and greatest, challenge was the lack of urban data at the national level. For many of the indicators we looked at, access to adequate housing, for example, data have simply not been collected in a rigorous manner across countries. For other indicators, data are

Table 1. Selecting Indicators

TOTAL INDICATORS TRIED FOR HCI 116 TOTAL INDICATORS USED FOR HCI 15 (12.93%					
INDICATORS TRIED: 7 USED: 2	INDICATORS TRIED: 46 USED: 3	INDICATORS TRIED: 24 USED: 4	INDICATORS TRIED: 15 USED: 2	INDICATORS TRIED: 10 USED: 2	INDICATORS TRIED: 14 USED: 2
INSTITUTIONAL CAPACITY	GENDER	RESIDENTIAL INFRASTRUCTURE	POVERTY	EMPLOYMENT	SUSTAINABILITY
Quality of Government International Country Risk Guide	Female Tertiary Enrollment World Bank	Urban Piped Water on Premises World Bank	Infant Mortality World Bank	Vulnerable Employment World Bank	Exposure to Environmental Risk Yale University
Government Effectiveness World Bank	Maternal Mortality World Bank	Urban Access to Electricity World Bank	Urban Poverty Headcount World Bank	Formal Employment ILO / OECD	Electricity Production from Renewable Resources World Bank
	Female Employment in Non- Agricultural Sector World Bank	Urban Access to Improved Sanitation World Bank			
		Water Safety Yale University			

wealth increased, carbon emissions also increased.

After testing 116 data sets, only 15 were found to satisfy HCI requirements. Table 1 shows the final 15 indicators chosen, across the six HCI dimensions.

available at the national level, but are not disaggregated between urban and rural. For example, since Habitat II, no European country collected data on poverty at the urban level. While recognizing that using combined urban and rural data is not ideal. the importance of including some indicators, such as Exposure to Environmental Risk, in the assessment outweighed the problems of using aggregated national-level data.

For other indicators, data have not been collected consistently in the period between Habitat II and the present. The initial HCI analysis focuses on assessing progress on individual indicators during the period between 1996 and 2014, plus or minus one year depending on data availability.

The SERF methodology, used to calculate the HCI, posed constraints in choosing indicators. The SERF methodology relies on an underlying assumption of a positive correlation between an indicator and economic growth. For many of the data sets, this was not the case, and therefore they could not be used. For example, measurements of inequality using World Bank data showed no correlation with income, despite research suggesting otherwise, such as the Kuznet's Curve hypothesis. Gender-related indicators, which will be discussed in depth in a later section. also frequently showed no correlation with income. Some environmental measurements, such as reduced per capita carbon emissions, showed the reverse—as

FINDINGS

The HCI from 1996 to Present: Global Overview

Map 1 shows the HCI scores for 1996, at the time of Habitat II. Even after adjusting for resource differences, outcomes were highly varied. North America, Europe, and Australia scored very highly, Latin America had scores in the 60s and 70s, and Sub-Saharan Africa showed a wide range of scores, from one of the lowest—Mali—to two of the highest—Kenya and Zimbabwe.

The average HCI score at the time of Habitat II was 69.68, meaning the world was, on average, performing at around 70% of what could have been possible given the level of resources available. Among the areas of best performance were *Poverty*, with a global average score of 85.5, and *Infrastructure*, with a global average score of 76.11.

The Sustainability category was the weakest globally, with an average score of only 46.7. At the time of Habitat II and the Istanbul Declaration, the threat of climate change and the dangers of increasing carbon emissions were still largely unknown and not yet widely accepted. Nevertheless, the Istanbul Declaration made several mentions of broad notions of sustainability, environmental responsibility, and preventing environmental degradation. Reflecting current conceptions and priorities of



© Melissa De La Cruz

environmental responsibility, half of the HCI sustainability measure is based on renewable energy production. Given that this is a more recent environmental priority, the global average of only 46.7 in 1996 may not be surprising.

In the period between Habitat II and the present, there has been considerable economic growth, driven largely by the Asian economies—China, in particular. However, as the 2016 World Cities Report¹ has emphasized, despite becoming engines of economic growth in a globalized world, the challenges cities are facing have grown migration, both economic and conflictrelated, has increased; climate change has emerged as a major global threat, and cities in both the North and South have become centers of growing intra-urban and intranational inequality, putting them at the center of political unrest—as was evident in the recent "Brexit" vote in the United Kingdom, which the director of the London School of Economics called "a vote against London."2

In the period between 1996 and the present, cities also endured numerous shocks—from the global recession of 2008, which increased income inequality in two-thirds of American metropolitan areas, to increasingly frequent terrorist attacks targeting urban areas.

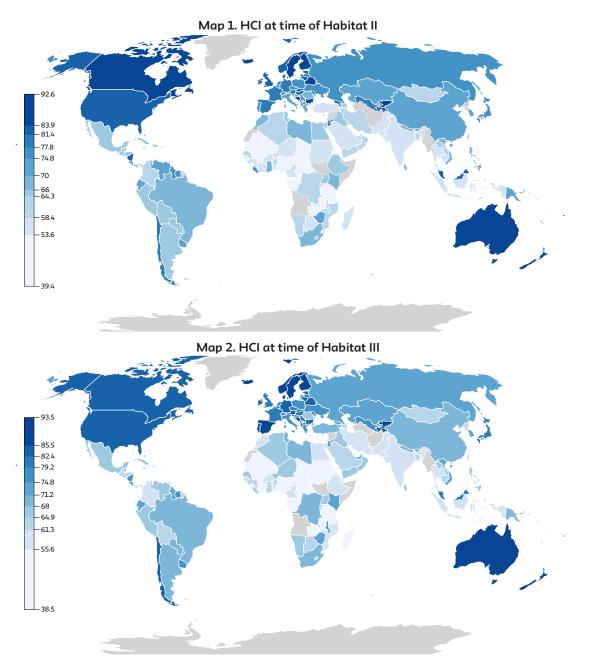
During this period of economic growth as well as increasing challenges to cities, how well have governments kept to the commitments made at Habitat II in Istanbul? Map 2 shows the current HCI scores (using the most recent data, usually from 2014), while Map 3 shows the change between the 1996 HCI scores and the current HCI scores. Overall, there has been extremely little progress, with the average HCI score increasing only 1.49 points, from a global average of 69.68 in 1996 to a current average score of 71.17. As Map 2 shows, the Americas continued to be medium-tohigh performers, with Argentina and Brazil both increasing. In Western Europe, some of the few countries to lag behind the rest

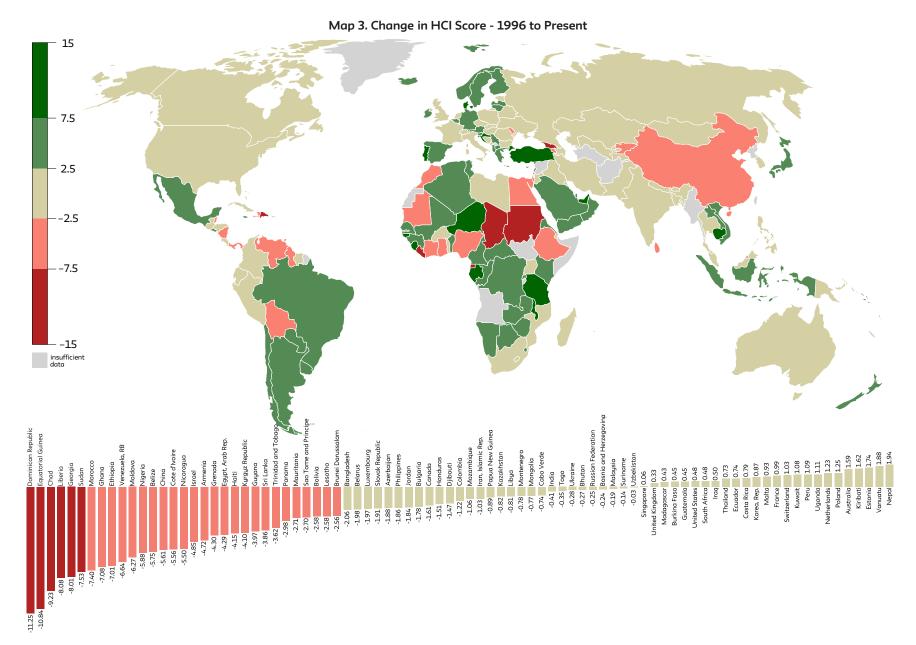
of the continent in the 1996 HCI scores— Spain, Portugal, and Ireland—were able to catch up, although economic decline as a result of the global recession would have influenced their scores.

In terms of greatest increases and decreases by country, Map 3 shows the extent to which change has varied. While Latin America and Southeast Asia, with a few exceptions, increased their HCI scores. Northern and Sub-Saharan Africa showed extremes in both directions, with both large increases and decreases in HCI scores. Also troubling was the finding that the two most populous countries either made no progress, as was the case in India, or actually had a significant decline in the HCI score, as was the case in China.

Among the drivers of the changes (or lack thereof) in the HCI scores, the greatest change was in the Gender dimension, as is discussed in-depth in a later section. The average gender HCI score increased by 8.62 points in the period between Habitat II and the present, rising to a global average of 76.82—one of the highest among the HCI categories. This rise was due in part to phenomenal increase in the Female Tertiary Enrollment indicator, which rose by an HCI score of 22.13 points, by far the largest positive change among the indicators.

Minimal progress was made in the Infrastructure dimension (+1.78), while Poverty (+5.69) and Sustainability (+3.63) improved modestly. Only two dimensions saw declines in average HCI scores—



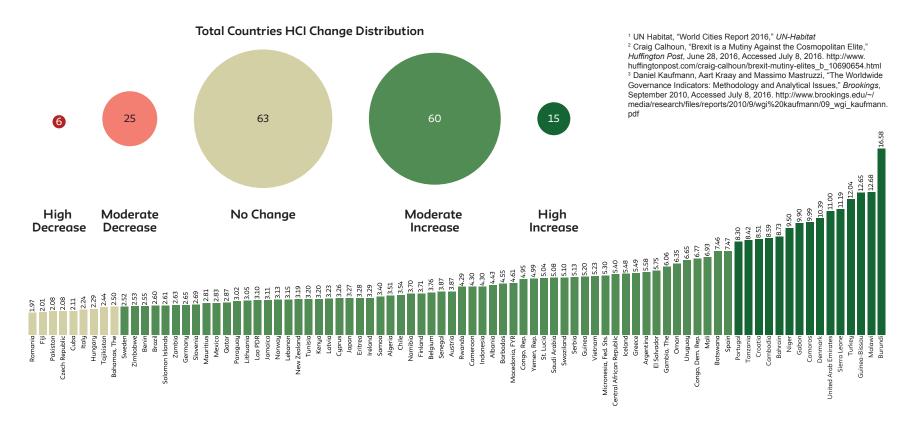


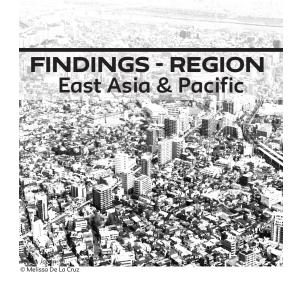
Change in HCI Scores - Lowest to Highest

Employment and Institutional Capacity. While decline in the *Employment* dimension was negligible (-0.56), Institutional Capacity had the most extreme change among the dimensions, with the global average HCI score for Institutional Capacity falling by 11.26 points, from 74.8 in 1996 to 63.5, and accounting in large part for the overall

lack of HCI progress, since the decline was large enough to offset gains made across the other categories. The two components of the Institutional Capacity dimension, the International Country Risk Guide's Quality of Government index and and the World Bank's Government Effectiveness index. declined by 18.09 and 6.52, respectively.

However, the two Institutional Capacity measurements do not take into account levels of participation, democracy, or freedom, but rather are based on surveys sent to firms and NGOs to assess perceptions of governments' abilities to provide public services.3





OVERVIEW

Since 1996, the region has experienced both rapid urbanization and fast-paced economic growth. As a whole, the region's urban population has grown by 74% since 1996, and the region accounted for almost two-fifths of global economic growth in 2015, more than twice the combined contribution of all other developing regions.1

On average, the HCI score increased by only 1.5 points in the region. The best performers were Cambodia (+8.6), Micronesia (+5.3), and Vietnam (+5.2), while the worst performers were Brunei (-2.5) and China (-5.6). The largest improvements were in the Gender and Poverty dimensions. For individual indicators, the biggest improvements were in Female Tertiary Enrollment and Maternal Safety.

NOTABLE COUNTRIES

Cambodia has made significant improvements across all dimensions except

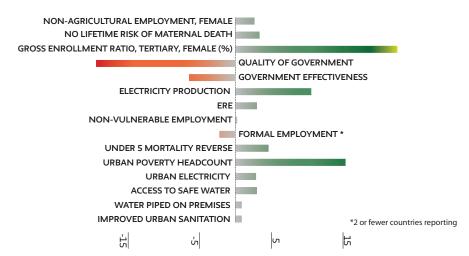
for Institutional Capacity, more specifically the indicator Government Effectiveness. It was the top performer in Residential nfrastructure (+19), Employment (+21) and Gender (+21) as well as the top performer for overall HCI (+8.6) in East Asia & the Pacific.

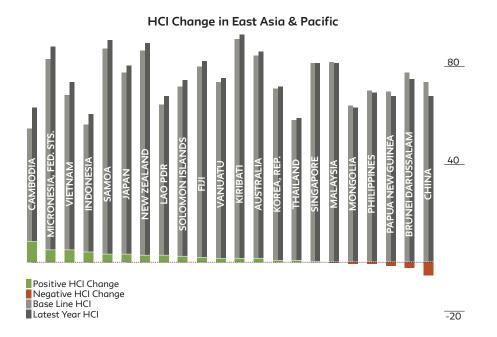
Vietnam has doubled its per capita income since 1996, noting significant improvements in the *Employment* (+13), *Sustainability* (+10) and Gender (+13) dimensions, specifically the indicators of Non-Vulnerable Employment, Environmental Risk Reduction, Female Tertiary Enrollment and Female

Non-Agricultural Employment. Vietnam's urban population has grown by 85 percent since 1996.

China was the lowest ranking country in the overall HCI for the region. China's low HCI performance indicates that the HCI indicators have not improved at the same rate as GDP per capita increased. China's income per capita increased from \$2,700 in 1996 to around \$12,000 in 2014. Additionally, the urban population has increased by 96 percent. The country has at least 10 cities with more than 7 million people, the largest three being Shanghai,

HCI Change by Indicator 1996-2014 in East Asia & Pacific





Beijing, and Tianjin. The most significant changes occurred in the HCI dimensions of Institutional Capacity (-31) and Residential Infrastructure (-5). In the Sustainability dimension. China's score has decreased in both indicators. The country still relies on coal as a main source for electricity generation.

Despite China's low performance in the HCI dimensions, half a billion people were lifted out of poverty over the last 30 years.² According to a Human Rights Watch report. the Chinese government, under President Xi Jinping, has rejected the "Western ideas of constitutional and human rights as models for China.3 The government has silenced voices critical of one-party rule and tightly

controls any use of social media. There is some leeway for independent coverage that is not seen as a threat to social stability or the party.

CHANGE BY DIMENSION & INDICATOR

Residential Infrastructure

Cambodia, Thailand and Malaysia have made the largest improvements in Infrastructure HCI scores in the last two decades. The three nations have nearly doubled their GDP per capita since 1996, which suggests that the improvements in the provision of infrastructure services has not only kept up with economic growth, but that the gap between actual performance

and maximum possible performance is narrowing.

Thailand's urban population has grown 83% since 1996, with Bangkok having the largest share of the urban population, with more than 5 million people living in the city center. Thailand improved its overall *Infrastructure* score by 8.9 points and had the best performance in Urban Electricity, improving by 37 points. All these gains occurred despite the Institutional Capacity score falling by 37 points during the same period. Successful examples of infrastructure improvement programs include:

- The Baan Mankong Collective Housing program was launched by the Thai government in 2003. The program channels government funds through infrastructure subsidies, soft housing and land loans to poor communities. These communities plan and carry out improvements to housing, environment, basic services and tenure security including budgeting themselves.4
- The National Housing Authority (NHA) provides housing and financial assistance to low and middle-income people. They are also heavily involved in slum upgrading and squatter housing improvements.5

The worst performers for this category are: Indonesia, China, and Mongolia.

Despite **Indonesia's** recent economic growth, the country's score for the Infrastructure dimension fell -3.8 points, partly being pulled down by the Access to Safe Water indicator. The last 20 years has seen Indonesia's population balloon to approximately 250 million people in 2015. The urban population has increased by approximately 87 percent since 1996.

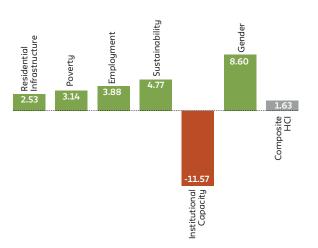
- Indonesia is currently in need of 13 million houses. However, there is still a lack of access to financing for many, which makes purchasing homes even more difficult.⁶
- At the national level, more than 37 million people lack access to safe water and sanitation facilities.⁷

Sustainability

The Pacific Islands contain the top five countries accounting for the largest increase in *Sustainability* HCI scores for the Asia Pacific region: **Micronesia**, **Solomon Islands**, **Papua New Guinea**, and **Fiji**, outpacing the majority of the Southeast Asian nations. The Pacific Islands' urban population have also increased in the last 20 years (an average of 35%). However, the top performing countries have indicator data only for *Environmental Risk Reduction*, and therefore *Renewable Electricity Production* was not included in the calculation.

Only ten countries in the region collected data on the indicator *Renewable Electricity Production*. From the countries that collect this data, there appears to be a positive change, except for the case of the **Philippines**, where *Renewable Electricity Production* scores have dropped significantly. This is likely due in part to the fact that the country has opened 15 new hydroelectric power plants since

HCI Change by Dimension in East Asia & Pacific



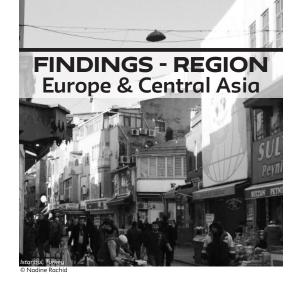
1996, thereby reducing the share of its energy production from non-hydroelectric renewables.

Institutional Capacity

Japan is the only country that had a positive change in the HCl score in this dimension. Other countries in the region showed a significant decline in the average of both indicators comprising this dimension.

China, with a decline of -31, scored the worst in this dimension. However, as noted previously, the data for this dimension are based on surveys on government effectiveness and quality, but does not address issues of democracy or participation.

- ¹ World Bank, "East Asia Pacific Growth Remains Resilient in Face of Challenging Global Environment, says World Bank," World Bank, April 10, 2016, Accessed July 8, 2016. http://www.worldbank.org/en/news/pressrelease/2016/04/10/east-asia-pacific-growth-remains-resilient-in-face-ofchallenging-global-environment-says-world-bank
- ² World Bank, "Reforms in Land Use and Local Finances Will Help Make China's Urbanization More Efficient," World Bank, March 25, 2015, Accessed July 8, 2016. http://www.worldbank.org/en/news/ feature/2014/03/25/reforms-in-land-use-and-local-finances-will-help-makechinas-urbanization-more-efficient
- ³ Human Rights Watch, "China Events of 2015," Human Rights Watch, Accessed July 10, 2016. https://www.hrw.org/world-report/2016/country-chapters/china-and-tibet
- ⁴ CODI, "Baan Mankoong Collective Housing," CODI, Accessed July 8, 2016. http://www.codi.or.th/housing/aboutBaanmankong.html
 ⁵ Emily Norford and Terra Virsilas, "What Can We Learn from Thailand's Inclusive Approach to Upgrading Informal Settlements?," The City Fix, May 12, 2016, Accessed July 8, 2016, http://thecityfix.com/blog/thailands-inclusive-upgrading-informal-settlements-terra-virsilas-emily-norford/
 ⁶ Anita Rachman, "So many homes in so little time: Widdod's Ambitious Housing Target," Wall Street Journal, May 7, 2015. Accessed July 10, 2016. http://blogs.wsj.com/indonesiarealtime/2015/05/07/so-many-homes-so-little-time/
- ⁷The Jakarta Post, "Coping with water scarcity in Indonesia," The Jakarta Post, March 25, 2015, Accessed July 10, 2016. http://www.thejakartapost.com/news/2015/03/25/coping-with-water-scarcity-indonesia.html



OVERVIEW

Bolstered by high levels of urban infrastructure and relatively low poverty rates, Europe and Central Asia began 1996 with the highest average HCl of any region, at 79.32, and while there was no significant progress made during the period between Habitat II and the present, the region still has the current highest average HCl at 81.22. Overall, Institutional Capacity and *Employment* were the only two dimensions that showed negative changes in the HCI (-7.76 and -2.06, respectively). Gender showed the largest improvement, increasing an average of 10.68 points.

NOTABLE COUNTRIES

Of the countries that made the most significant progress in Europe and Central Asia, Turkey, where Habitat II took place, showed the largest increase in the HCI score, increasing 12.04 points overall. Turkey's increase in the composite HCI score was driven by advances in the Poverty and Gender dimensions, which rose by 30.85 points and 30.65 points, respectively. as well as small increases in the Infrastructure and Sustainability dimensions. The only decline was in the Institutional Capacity dimension, which fell -8.06 points. Possible factors contributing to the change include:

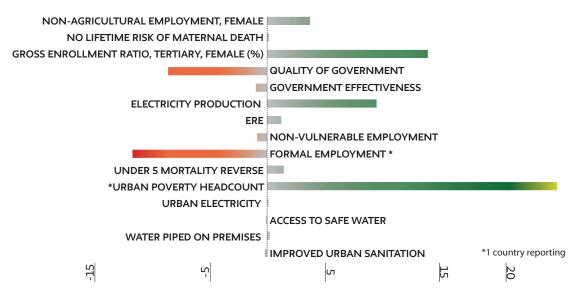
- In less than a decade, the country's per capita income has tripled to exceed \$10.500.
- Extreme poverty fell from 13 percent to 4.5 percent, and moderate poverty from 44 percent to 21 percent, between 2002 and 2012.

 Maternal mortality has reduced from 86 deaths per 100,000 people in 1995 to 16.4 deaths per 100,000 in 2010, putting Turkey below the ECA regional average for this indicator.1

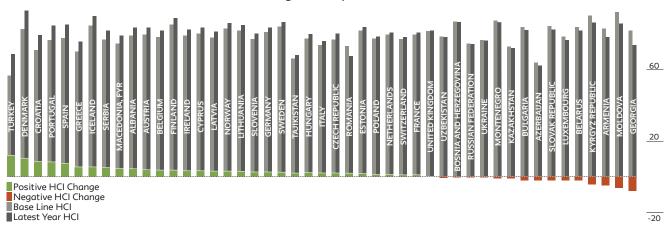
Denmark had the second highest increase in the HCI for the region, increasing by 10.39 points. While on most of the dimensions Denmark had little change (less than 3 points, plus or minus), Denmark increased 18.15 points in the Gender dimension, and most notably, 45.44 points in the Sustainability dimension. Possible factors include:

• In 1992, Denmark was the first country in the EU to introduce a CO2 tax and generated

HCI Change by Indicator 1996-2014 in Europe & Central Asia



HCI Change in Europe & Central Asia



nearly 20% of its electricity from wind power.

 Denmark was highly dependent on imported oil from the Middle East until 1973. when it was greatly impacted by spikes in oil prices.2 Today, more than 40 percent of Denmark's energy supply is generated from wind power alone. Denmark plans to generate 50 percent of the country's energy supply from renewable resources by 2020, and 100 percent by 2050.3

CHANGE BY DIMENSION & INDICATOR

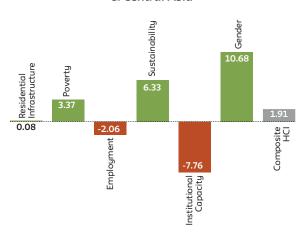
Sustainability

On average, Europe and Central Asia increased in the Sustainability dimension by 6.33 points due to investments in renewable energy production. The Nordic countries of Finland, Iceland, and Denmark (as discussed above), made the largest increases in the Sustainability dimension, largely attributable to the

Renewable Electricity Production (excluding hydroelectric) indicator. Important factors include:

- Much of Finland's energy consumption comes out of necessity given the country's far northern latitude, with 22% of energy used for heating. 25% of Finland's energy comes from renewable sources. Electricity produced from biomass currently makes up 20% of the renewable energy consumed throughout the residential, industrial, and service sectors.4
- Nearly 100% of Iceland's electricity production comes from renewable energy. with 75% derived from hydroelectric generation, which is not included in the HCI, and 25% from geothermal energy. Geothermal energy is used to heat 89% of houses in Iceland as a result of government efforts in the 1940s.5

HCI Change by Dimension in Europe & Central Asia



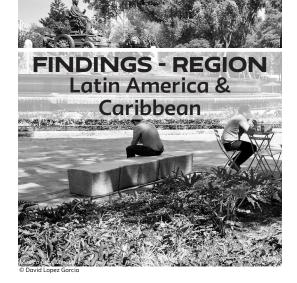
¹ United Nations, "Maternal Mortality fell by almost half between 1990 and 2015," UNICEF, Accessed July 10, 2016. http://data.unicef.org/maternal-health/maternal-

² Denmark.DK, "A World-Leader in Wind Energy," Denmark DK, Accessed July 10, 2016. http://denmark.dk/en/green-living/wind-energy/

³ Danish Energy Agency, "Danish Climate and Energy Policy," Danish Energy Agency, Accessed July 10, 2016. http://www.ens.dk/en

⁴ International Energy Agency, "Energy Policies of IEA Countries - Finland," International Energy Agency, 2013, Accessed July 10, 2016. http://www.iea.org/ publications/freepublications/publication/Finland2013 free.pdf

National Energy Authority, "Energy Data," Government of Iceland, Accessed July 10. 2016. www.nea.is



OVERVIEW

Of the 41 countries that make up Latin America and the Caribbean, 29 were included in the HCI. Many of the Caribbean island nations lacked sufficient data. and failed the meet the minimum data requirements to calculate an HCI score. GDP per capita (PPP, constant 2011 International Dollars) rose from \$8,994 in 1996 to \$13,220 in 2014. The average HCI score for the region fell very slightly. by -0.11, from 71.97 in 1996 to 71.86 in 2014, however it should be noted that most countries in the region made small to moderate gains in HCl scores, but this was offset by a very sharp decline in the scores of Venezuela and the Dominican Republic. The region's best average performance was in the Poverty dimension with an average total change for the category of 6.65 and the worst performance was in the Institutional Capacity dimension with an average change of -13.16. Overall, Uruguay was the best performer in the region with a change of

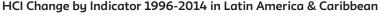
6.64 between the starting year and the final year, followed by El Salvador and Argentina, with increases of 5.75 and 5.57, respectively.

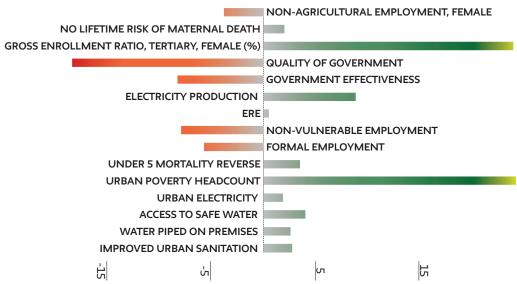
The region's best performance in an individual indicator was the Urban Poverty Headcount, with an average increase of 24 points between 1996 and the latest year (only 9 countries have information for this indicator). The highest HCl change for the Urban Poverty Headcount indicator was for Argentina, with a increase of 60.29, from a score of 25.73 in the base year to a score of 86.03 in the final year. The second highest improvement was Uruguay with 40.45, from 31.64 in the base year to 72.09 in the latest year. The worst performance for the

region was on the Quality of Government indicator with an average change of -18.3. Venezuela had the lowest final score and largest decline, falling an outstanding -50.75 points, from a starting score of 58.23 to a final score of only 7.47. Nicaragua had the second worst performance, with a decline of -49.36, from a beginning score of 96.14 to a final score of 46.77.

NOTABLE COUNTRIES

Uruguay had the highest HCI score change in the region, increasing by 6.64 points. The country's best performance was in the Urban Poverty Headcount indicator, with an HCI score increase of 40.45, and the Female Tertiary Enrollment indicator, with an





HCI score increase of 31.14 points. Uruguay was also the only country in Latin America that scored 100 points in the Access to Safe Water indicator, not only in the base year but also in the latest year, which translated to an HCI score change of 0. Low performances of a -8.85 HCI score change in the Government Effectiveness indicator. a decline in the Female Non-Agricultural Employment indicator of -5.06, and a drop in the Non-Vulnerable Employment indicator of -4.19 points were highly compensated for by positive changes in the indicators in the Poverty and Residential Infrastructure dimensions.

Uruguay's good performance reflects continuous effort to maintain economic stability, together with innovative social policies to address a rather small population.

- Currently, Uruguay stands out in Latin America for its success as an equitable society and its high per capita income, low poverty rate and absence of extreme poverty. As a percentage of the total population, Uruguay has the largest middle class in the region. It has achieved high ratings on several measures of well-being, such as the Human Development Index, the Human Opportunity Index and the Economic Freedom Index.
- Inclusive social policies have increased coverage of social programs. For example, approximately 87% of the population over age 65 is covered by the pension system: this figure is among the highest in Latin America and Caribbean, along with those of

Argentina and Brazil.1

The **Dominican Republic** had the largest HCI score decline in Latin America, falling -11.25 points. Despite advances in several indicators, the country's HCI performance was principally due to its performance in the Non-Agricultural Female Employment indicator, with a decline of -58.46 points, and the Quality of Government indicator which fell -48.73 points.

The Dominican Republic has faced political and economic challenges in the past 20 years that have deteriorated government perceptions and poverty relief efforts, leading to unstable labor market conditions and low levels of public investment that have translated to a lack of trust towards the government. According to the ILO's 2013 report "Growth, Employment And Social Cohesion In The Dominican Republic"2, the most notable challenges the country has faced in the past two decades include:

- The lack of impact of economic growth on poverty is particularly worrisome. According to official national estimates using a World Bank methodology, poverty levels in 2010 were the same as in 1990.
- The number of poor households increased rapidly in the mid-2000s, in parallel with the decline in the level of real wages, as a result of the domestic crisis and the subsequent high inflation, which reduced the real incomes of the most vulnerable. Aside from this "cyclical" effect, the trend is one of stubborn persistence in the share of people

living in poverty. This pattern differs from the experience of comparable countries in the region. For instance, it is in stark contrast with the improvements registered in Brazil, Costa Rica, Peru and Colombia where. according to World Bank estimates, poverty levels were around 40 percent lower in 2010 than at the beginning of the decade.

 Poverty is exacerbated by a historical legacy of underinvestment in public goods and highly inefficient delivery of public services in health, education, electricity supply. The country lies at the bottom of regional comparative rankings for expenditure in those areas, according to figures from CEPAL.

CHANGE BY DIMENSION & INDICATOR

Povertv

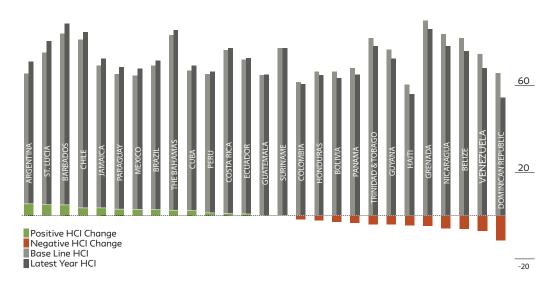
Latin America's best performance was in the Poverty dimension with an average increase of 6.65, largely due to an improvement in the Urban Poverty Headcount indicator, which had an increase of 24.41 on average. This result reflects the overall improvement in poverty indicators in the region as acknowledged by multiple organizations such as the World Bank³, the IMF⁴, and the UNDP^{5,6}. During a period of high urbanization rates for the region—between 1996 and 2014 the urban population grew by 40.5% with an average annual growth of 1.5%—and the highest economic development of this century—GDP grew between 1996 and 2014 at an average of 3.1% annually, despite two economic

recessions, in 1998 and 2008—the region's improvement in the *Urban Poverty* Headcount indicator reflects a strong effort to improve the quality of life and living conditions in urban areas. According to the UNDP⁷, between the years 2000 and 2014, more than 56 million people have been lifted out of poverty in Latin America and the Caribbean.

Argentina⁸ had the best performance in the Poverty dimension with an HCI increase of 31.43, driven by an increase of 60.29 points in the *Urban Poverty Headcount* indicator. The urban population classified as poor based on the national poverty line decreased by 31.2% in the period between 2001 and 2014, while the per capita GDP of the country grew 46.78% in the same period. This result is higher than the average values for the indicator in the region. The change in poverty indicators for Argentina has been recognized and highlighted by several reports on poverty, including a 2014 UNDP report which states that Argentina had an outstanding achievement followed by Chile, Perú, and Bolivia9.

Gender

The Latin American region's second best HCI improvement was in the Gender dimension, with an average increase of 4.5 points, attributable to an exceptional average score increase in the Female Tertiary Enrollment indicator of 24.19 for the period between 1996 and 2014. The region also improved its Maternal Safety indicator score, with an increase of 2.06. However, the region still had a poor performance in



the Female Non-Agricultural Employment, score, which declined by -3.82.

Barbados had the best performance in the *Gender* category, with an HCI increase of 22.19 points. The island has been characterized by its comparatively high Human Development Index and recently ranked 24th in the Global Gender Gap Index 2015¹⁰. In the HCI, the country had nearperfect performance in the Maternal Safety indicator, scoring above 99 in both the base and the final years. The Female Tertiary Enrollment indicator had a significant improvement between the base and final vears, with 49% of women enrolled in 1999 going up to 90% in 2011, leading to an HCI score increase of 42.54 points. According to the Country Gender Assessment from the Caribbean Development Bank, the

country's high performance on gender equality is a result of an ongoing institutional effort following the ratification of several international and human rights instruments¹¹.

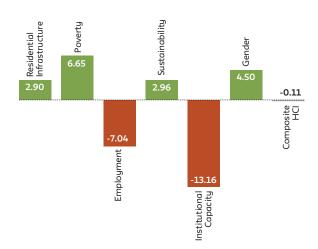
Chile had the best performance in the Female Tertiary Enrollment indicator with an HCI increase of 56.07 points. In 1996, 23% of the female population, mainly between 19 and 24 years, was enrolled in tertiary education and by 2013 enrollment grew to 88%.

 A 2005 law was passed that established a need-based student loan system. The new loan scheme, the Crédito de la Ley 20.027 para Financiamento de Estudios de Educación Superior, provides student loans guaranteed by the state and higher

education institutions to cover tuition fees. 12

• There has also been a generational reduction in the gender gap in educational attainment. As in most OECD countries. tertiary attainment is higher for men than for women among the older generation (55-64 year-olds), at 23% for men and 20% for women. However, for the younger generation (25-34 year-olds), the difference in tertiary attainment rates between men and women is only 1 percentage point, at 42% and 41% respectively¹³.

HCI Change by Dimension in Latin America & Caribbean



www.pagina12.com.ar/ diario/suplementos/cash/17-7827-2014-07-27.html. In February 2016 the Argentinian government called for a Statistical Emergency and the need to revise some of the official indicators used to measure social and economic conditions. For more information, please refer to https://aldiaargentina.microjuris.com/2016/01/08/decreto-552016administracion-publica-declaran-en-estado-de-emergencia-al-indec-y-al-

¹¹ Caribbean Development Bank, "Country Gender Assessment - Barbados," Caribank, January 2016, Accessed July 8,

2016. http://www.caribank.org/wp-content/uploads/2016/05/

CountryGenderAssessmentBarbados.pdf

¹³ OECD, "Chile," OECD, 2013, Accessed July 8, 2016. https://www.oecd. org/edu/Chile EAG2013%20Country%20Note.pdf

¹ World Bank, "Uruguay: Overview," World Bank, Accessed July 8, 2016. http://www.worldbank.org/en/country/uruguay/overview

² International Labor Organization, "Growth, Employment and Social Cohesion in the Dominican Republic." ILO Background Paper, ILO-IMF Tripartite Consultation on Job-Rich and Inclusive Growth in the Dominican Republic in Santo Domingo, January 13, 2013, Accessed July 10, 2016. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/ documents/meetingdocument/wcms 204604.pdf

³ World Bank, "Breaking the Cycle of Chronic Poverty in Latin America and the Carribbean." World Bank, March 9, 2015, Accessed July 8, 2016. http://www.worldbank.org/en/news/press-release/2015/03/09/breaking-thecycle-of-chronic-poverty-in-latin-america-and-the-caribbean

⁴ Natalie Ramirez-Djumena, "Latin America's Priorities for the Next Decade," International Monetary Fund, October 10, 2015, Accessed July 8, 2016. http://www.imf.org/external/pubs/ft/survey/so/2015/car101015a.

⁵ United Nations, "MDG Goals Report 2015 – Backgrounder, Latin America and the Caribbean," United Nations, July 6, 2015, Accessed July 8, 2016. http://www.un.org/millenniumgoals/2015 MDG Report/pdf/backgrounders/ MDG%202015%20PR%20Bg%20LAC.pdf

⁶ United Nations, "Poverty: the official numbers," United Nations, 2010, Accessed July 8, 2016. http://www.un.org/esa/socdev/rwss/docs/2010/

chapter2.pdf

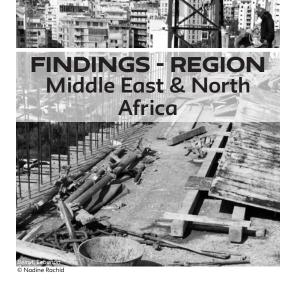
⁷ BBC, "UNDP: Poverty down in Latin America and the Carribean," BBC, August 26, 2014, Accessed July 8, 2016. http://www.bbc.com/news/worldlatin-america-28946221

⁸ Agustin Salvia, "Como medir la pobreza," Pagina12, July 27, 2014, Accessed July 8, 2016. http://www.pagina12.com.ar/diario/suplementos/ cash/17-7827-2014-07-27.html

⁹ Argentina has been recognized by the excellent results in terms of poverty reduction in the region. The data for the HCI Urban Poverty Headcount comes from the World Development Indicators which base the indicator on data collected through the Permanent Household Survey (EPH) in Argentina. The EPH collects information on the variation of prices for those goods and services included in the basket of consumption used to define the Consumer Price Index that measures inflation. Recent debate over the methodology implemented for the calculation of inflation in the country has brought about the need to revise the information collected through such survey. It is important to clarify that if the data used to calculate the Consumer Price Index does not measure the variation of prices accurately, then indicators measuring poverty might be overestimated once poverty is measured by the purchasing power of a household income according to the prices of the goods in the consumer bundle. For more information concerning this debate please refer to http://

¹⁰ World Economic Forum, "The Global Gender Gap Report 2015," World Economic Forum, 2015, Accessed July 8, 2016. http://www3.weforum.org/ docs/Media/GGGR15/GGGR2015 FINAL.pdf

¹² International Comparative Higher Education and Finance Project, "Country Profile: Chile," University of Buffalo, December 28, 2006, Accessed July 8, 2016. http://gse.buffalo.edu/org/inthigheredfinance/files/ Country_Profiles/Latin_America/Chile.pdf



OVERVIEW

The period between Habitat II and the present has been a tumultuous time for the Middle East and North Africa, from the political unrest of the Arab Spring to ongoing civil war in Syria that continues to impact surrounding countries. However, the price of crude oil, on which the economies of many countries in the region depend, rose sharply during the period, from a low of \$16.44 per barrel in 1998 to a high of \$151.72 in 2008 (the most recent data available to the HCI is from 2014, and therefore does not reflect the economic impact of the steep decline of oil prices that began in 2015).1

As a whole, the region had virtually no change in the HCI, increasing on average only by 1.56, from 65.15 in 1996 to 66.72 currently. Major petroleum exporters, including the United Arab Emirates (+10.99), Bahrain (+8.72), Oman (+6.34), and Saudi Arabia (+5.07) had the largest increases in HCI, while Morocco (-7.39), Israel

(-4.85), and Egypt (-4.29) were the worst performers, possibly due to political and military conflict during the time period.

Among the indicator dimensions, gains were made in Infrastructure, Poverty, and Gender, while average HCI scores decreased in Institutional Capacity. However, among individual indicators, notable gains were made in Female Tertiary Enrollment, while the Urban Poverty Headcount. Quality of Government, and Female Non-Agricultural Employment showed large declines in HCI scores.

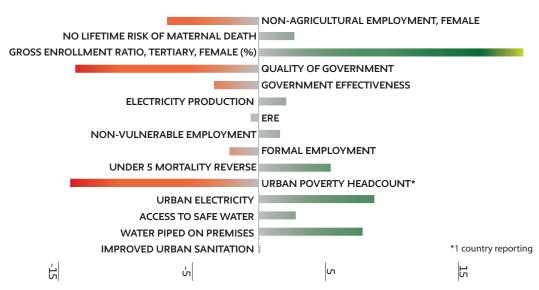
NOTABLE COUNTRIES

Rising from 58.48 to 69.47, the United Arab Emirates had the highest increase in HCI

score in the region, increasing by 10.99 points. The increase was in large part due to gains made in the *Institutional Capacity* dimension, which increased by 29.35 points, followed by the *Infrastructure* dimension, which increased by 12.2 points. In the Infrastructure dimension, indicators with the largest gains were Access to Electricity (+29.0), Piped Water on Premises (+10.45), and Access to Safe Water (+7.93). Possible factors contributing to the increase include:

• For most of the period under analysis, President Zayed bin Sultan Al Nahyan instituted policies aimed at investing oil revenues in health, education, and infrastructure.

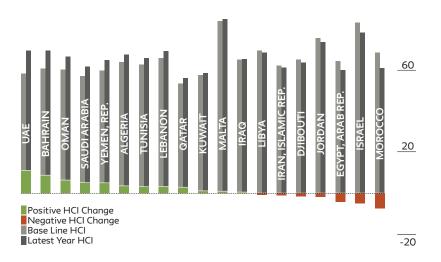
HCI Change by Indicator 1996-2014 in Middle East & North Africa



- The United Arab Emirates ranks highly in the Human Development Index, having made significant progress since 1980.
- · According to the annual World Competitiveness Report, the UAE ranked first globally in the field of government efficiency, the quality of government decisions, the absence of bureaucracy, and good management of public funds.2
- The United Nations Conference on Trade and Development (UNCTAD) reported in 2014 that the UAE ranks 2nd globally in attracting and receiving foreign investments.3
- The 2013 World Economic Forum Report highlights that the UAE ranks first in the Middle East and North Africa region in terms of gender equality in the fields of education. health care, and political and economic contributions.4

With a starting HCI of 60.88 and a current HCI of 69.61, Bahrain's 8.72-point improvement, makes it the second best performer in the region. This performance is due primarily to accomplishments in the dimensions of Infrastructure and Gender. Within infrastructure. Bahrain made a massive 71.43-point increase on Piped Water on Premises, and a 19.97-point increase in Access to Electricity. Within the Gender dimension. Bahrain had a 32.97-point increase in the Female Tertiary Enrollment indicator. Bahrain's only decreasing indicator dimension was Institutional Capacity (-2.31 points).

HCI Change in Middle East & North Africa



The following country characteristics are notable:

- Since early 2011, the country has experienced sustained protests and unrest inspired by the regional Arab Spring, particularly by the majority Shia population.
- The country's capital. Manama, is home to many large financial institutions. Bahrain ranks high in the Human Development Index and is categorized by the World Bank as a high-income economy.
- From 1994 to 1997, around the time of Habitat II. there was episodic civil unrest following economic decline and demands for greater political rights for the mainly Shiite population after the Gulf war.

- In February 2001, Bahrainis voted to approve a new constitution that would institute a partially elected parliament and grant political rights to women.
- In 1999, HM King Haman bin Isa Al Khalifa came to power and Bahrain instituted reforms to become a constitutional monarchy and amended its constitution in 2002. This change has allowed Bahrain to continue with political and democratic reforms, with positive developments within laws and constitutional institutions.5

Egypt is one of the worst performers of the region, declining -4.29 points, from a score of 64.26 in 1996 to a latest year HCI of 59.98. The disappointing lack of achievement is due to poor performance in the *Institutional Capacity* (-21.11) and *Gender* (-11.62) dimensions. Despite these negative results, Egypt performed well in the *Sustainability* dimension, in which the country increased its HCl by 6.82 points—far above the regional average.

Interesting factors during the period include:

- A rapidly growing population and a limited amount of arable land have strained the country's resources and economy.
- Inspired by the 2010 Tunisian revolution, countrywide demonstrations and labor strikes led to the ouster of Hosni Mubarak. In 2012, Mohammed Morsi won the presidential election, but was removed from power by a military intervention in July 2013.
- Uncertain political, security, and policy environments have caused economic growth to slow significantly, hurting tourism, manufacturing, and other sectors while increasing the unemployment rate.

CHANGE BY DIMENSION & INDICATOR

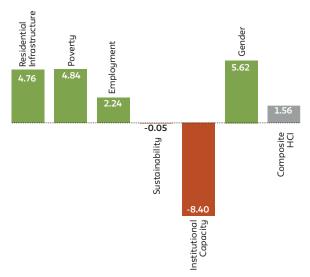
Sustainability

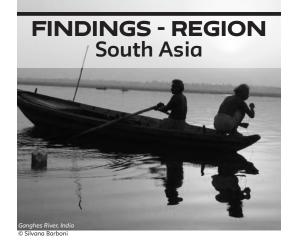
As a region, the Middle East and North Africa had no change on the *Sustainability* dimension of the HCI (-0.05). Within the *Sustainability* dimension, *Environmental Risk Exposure* declined by -0.60, while *Renewable Electricity Production* increased by 2.06. Though average changes in the *Sustainability* dimension were unremarkable, which is perhaps unsurprising given the

- region's relative abundance of fossil fuels, there were standouts among individual countries:
- Egypt made significant progress on *Environmental Risk Reduction*, increasing its HCI score from 45.5 to 57.7.
- However, the highest final HCI scores for Environmental Risk Reduction were Malta and Tunisia, with end HCI of 69.6 and 65.6, respectively.
- Only five countries in the region had data available for the *Renewable Electricity Production* indicator. However, Morocco, which does not have significant petroleum resources and has faced political unrest as a result of fuel prices, had an increase of 5.9 points on the HCI *Renewable Electricity Production* indicator, rising to 7.5.

- ¹ Macrotrends, "Crude Oil Prices 70 Year Historical Chart," Macrotrends, July 8, 2016, accessed July 8, 2016. http://www.macrotrends.net/1369/ crude-oil-price-history-chart
- ² Wam, "UAE ranks among most developed countries," Emirates 24/7, December 6, 2014, accessed July 8, 2016. http://www. emirates247.com/news/emirates/uae-ranks-among-most-developedcountries-2014-12-06-1.572337
- 3 Ibid.
- 4 Ibid.
- Ministry of Information Affairs of the Kingdom of Bahrain. "History," last modified February 9, 2014. http://www.mia.gov.bh/en/Kingdom-of-Bahrain/ Pages/History.aspx

HCI Change by Dimension in Middle East & North Africa





OVERVIEW

During the period between 1996 and the present, the HCI of South Asian countries increased by 1.26 on average. The HCI analysis included six countries in the region: Nepal, Bhutan, Pakistan, India, Bangladesh and Sri Lanka. The best performers were Pakistan (+2) and Nepal (+2), while the worst performers were Bangladesh (-2) and Sri Lanka (-3.8). Overall the region had the biggest improvements in the dimensions of Gender (+5.98) and Poverty (+4.85); and performed poorly in *Employment* (-5.63) and Institutional Capacity (-13.16). Among individual indicators, the region had very large improvements in *Urban Poverty* Headcount (+12.27) as well as Female Tertiary Enrollment (+18.47).

NOTABLE COUNTRIES

Sri Lanka is the only country with a moderate decrease in HCI (-3.8) for South Asia. Sri Lanka's relatively poor performance was brought about by declining figures in

Employment (-23) and Institutional Capacity (-21.85) dimensions. It received the worst scores in Quality of Government (-39) and Non-Vulnerable Employment (-23). Compared to other countries in the region, Sri Lanka has had lower urbanization rates. The total urban population has grown only 12% compared to Bangladesh at 105%. The scores could also be a result of a rapidly increasing GDP per capita. Country level data show that the GDP per capita has increased by more than 100% to approximately \$10,000.

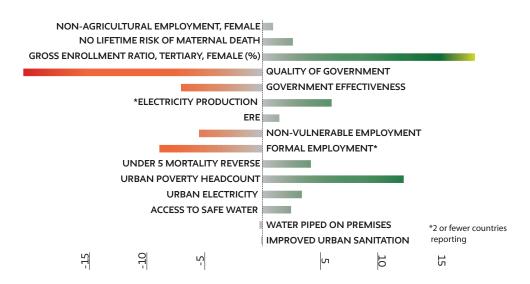
• The end of civil conflict in May 2009 saw GDP annual growth rise to around 8 percent, reflecting a "peace dividend" underpinned by

strong private consumption and investment. • Despite its low HCl scores, Sri Lanka has outperformed other South Asian countries

in accomplishing the MDG target of halving extreme poverty by 2015.1

Nepal's HCI has score increased by 3.5 points since 1996. This was brought about by improvements in the Sustainability and Poverty dimensions. More specifically, improvements in the indicators Environmental Risk Reduction and Female Tertiary Enrollment were drivers of the overall increase in the country's HCI score. Nepal has made these improvements with little increase in GDP per capita, improving only slightly from \$1,400 to \$2,200. More

HCI Change by Indicator 1996-2014 in South Asia

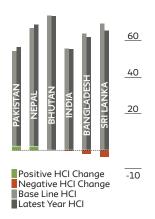


strikingly, the urban population in Nepal has increased by more than 100%. It should be noted, however, that the data do not reflect the devastation resulting from last year's 7.8 magnitude earthquake.

India, with a population of over one billion people, has had virtually no change in the last 20 years in the HCl score. Overall the country's HCI has changed by only -0.41. Among the dimensions, the country has improved in the Gender (+6.3) and Poverty (+15) dimensions. However, it received negative scores in Institutional Capacity (-19) and Infrastructure (-3.8). It is interesting to note that the country had minimal increases in the Sustainability (+2) dimension despite plans to implement solar energy projects.

- Six of India's largest cities have at least 5 million people living in them. The largest of which is Mumbai with over 15 million people.2
- Gender inequality has consistently been on the agenda for the government of India. However, traditional patriarchal norms continue to dominate society, where women are relegated to secondary status in the household and workplace.3
- The share of women in primary and secondary education are more or less equal. There has also been a subsequent rise in women in tertiary education in the last two decades. However, the numbers do not seem to reflect the participation of women in the labor force. The Atlantic reports that

HCI Change in South Asia



women represent only a quarter of the 400 million person labor force of the country.4

• The country has to balance providing for more than 300 million people who lack access to adequate electricity while also reducing its reliance on coal.5

CHANGE BY DIMENSION & INDICATOR

Poverty

- There was an overall improvement for South Asia in the *Poverty* dimension, with the average country score increasing by 5 points.
- Sri Lanka, Bangladesh and India had moderate increases in the indicator of *Urban* Poverty Headcount. While the rest of the countries—Pakistan, Nepal and Bhutan reported progress in the *Infant Mortality* indicator.

• Bangladesh had the highest improvement in this dimension with a 9.4 point increase. The country showed remarkable improvements in *Urban Poverty Headcount* and Infant Mortality rates.

Employment

- Pakistan and Sri Lanka scored the lowest for the region in the *Employment* dimension. Comparable data for the region are only available for the indicator Non-vulnerable Employment, where all countries performed poorly.
- Sri Lanka's Employment HCI score showed a negative change. The country only has information for the Non-Vulnerable Employment indicator, which dropped by -22 points since 1996. Employment continues to be highly segregated by gender, class, and race. The drop in score can also be attributed to the 2008 recession, which disproportionately hit the construction and

export sector.

• Overall data collection on employment figures for the region was poor. Pakistan was the only country to have data available for the two indicators in the dimension. India, Bangladesh and Sri Lanka were the only other countries in the region to have data available in the *Non-Vulnerable Employment* indicator.

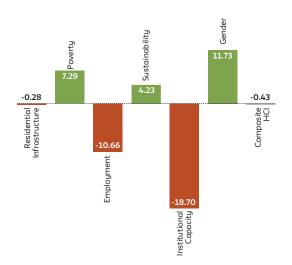
Sustainability

- The best performer in this dimension is **Pakistan** with a score increase of 19.27. However, the score came from just one indicator, *Environmental Risk Exposure*.
- **Bangladesh** had the largest decrease of 16 points in the dimension.

Gender 6,7

- Overall, there was a moderate increase in performance for the entire region for this dimension.
- Nepal (+20), Bhutan (+16) and India (+15) had high increases. This can be attributed to large increases in the Female Tertiary Enrollment indicator, where all countries in the region improved in in the last two decades.
- However, **Nepal** (+20) had the greatest HCI increase. The government of Nepal has been committed to addressing gender discrimination by implementing five year plans focused first on a welfare approach and then slowly transitioning into gender equality and women's empowerment.

HCI Change by Dimension in South Asia



However, the scores are yet to encompass the disparities between women's access to fixed assets, property and credit which are still very limited, and wage structures still discriminate against women.

¹ United Nations, "Millennium Development Goals Report 2015," United Nations, 2015, Accessed July 8, 2016. http://www.un.org/ millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20 (http%/2011).pdf

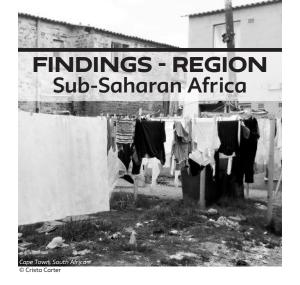
² Census Órganization of India, "City Census 2011," Government of India, 2011, Accessed July 10, 2016. http://www.census2011.co.in/city.php
³ Foundation for Sustainable Development, "Gender Equity Issues in India," Accessed July 10, 2016. http://www.fsdinternational.org/country/india/weissues

⁴ Dhruva Jaishankar, "The Huge Cost of India's Discrimination Against Women," March 18, 2013. Accessed July 10, 2016. http://www.theatlantic. com/international/archive/2013/03/the-huge-cost-of-indias-discriminationagainst-women/274115/

Shruti Ravindran, "India's Push for Renewable Energy: Is it Enough," National Geographic Magazine, September20, 2014. Accessed July 10, 2016. http://news.nationalgeographic.com/news/energy/2014/09/140919-india-modi-renewable-energy-science-world-wind-solar/

⁶ Asian Development Bank, "Overview of Gender Equality and Social Inclusion in Nepal," Asian Development Bank, December 2010, Accessed July 8, 2016, http://www.adb.org/documents/overview-gender-equalityand-social-inclusion-nepal

⁷ United Nations, "UNFPA Report: Gender Equality and Empowerment of Women in Nepal," *United Nations Nepal Information Platform*, March 17, 2009, Accessed July 8, 2016. http://un.org.np/node/10577



OVERVIEW

Since Habitat II, Sub-Saharan Africa's HCI improved by only 1.5 points—essentially unchanged. The best performers were Burundi, Malawi, Guinea-Bissau and Gabon, while the worst performers were Equatorial Guinea, Nigeria, and Liberia. On average, the urban population in the region grew by 62%. Despite the low average performance for the region, several countries made considerable progress, with 16 Sub-Saharan African nations ranking among the top 50 countries for overall HCI improvement.

Among the HCI dimensions, the biggest improvements in the region were in Gender, Sustainability, and Poverty, while scores in the Institutional Capacity and Employment dimensions declined. For individual indicators, Female Tertiary Enrollment, Urban Poverty Headcount, and Renewable Electricity Production saw the largest increases.

NOTABLE COUNTRIES

Burundi experienced the highest changes in HCl in the *Institutional Capacity* dimension. The urban population of Burundi has grown by 174% since 1996. However, Burundi is one of the few nations whose per capita income has declined in the last two decades, from \$753 in 1996 to \$733 in 2014. Burundi made significant improvements in Institutional Capacity (+53) and Gender (+17).

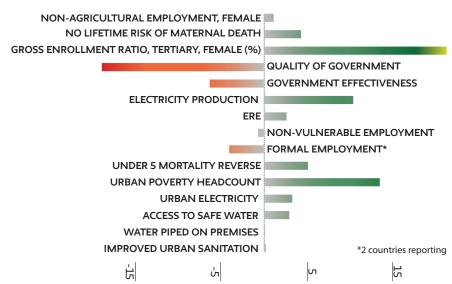
• Despite HCI improvement in the Institutional Capacity dimension, Burundi still has far to go in improving its governance. The political scene is now characterized by an authoritarian government, as well as harassment and intimidation by security apparatus of the state against opposition

members and the media.1

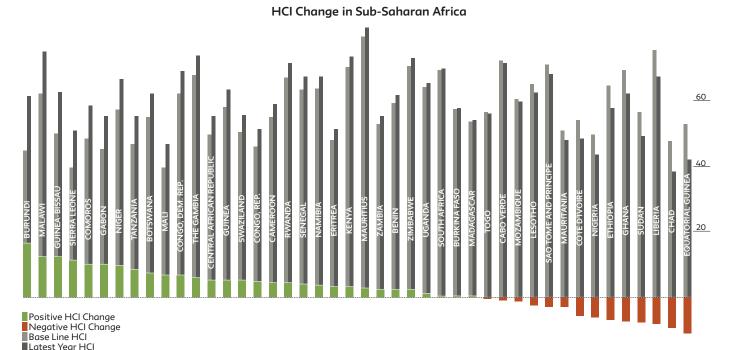
Malawi's biggest improvements came from the Poverty and Sustainability dimensions. Malawi's urban population has increased by 100 percent while the country's per capita income has increased by approximately \$100.

- Malawi was one of the countries most affected by the HIV-AIDS epidemic in the 1990s. A national AIDS commission was set up by President Muluzi in 2004. providing free antiviral therapy treatments to the public. Life expectancy has gone up in response (from 38 to approximately 55 years).
- The government of Malawi partnered

HCI Change by Indicator 1996-2014 in Sub-Saharan Africa



with UNPEI to raise awareness on the poverty-environment linkages. After the release of the Malawi State of Environment Outlook Report in 2010, there has been increased efforts to increase sustainable. environment and natural resource funding. The president has since launched an initiative to stop the use of charcoal for cooking. The initiative is called the National Cookstove initiative. targeting more than 2 million households.2



CHANGE BY DIMENSION & INDICATOR

Residential Infrastructure

Botswana, with an increase of 20.79, made the largest improvement in the *Infrastructure* dimension. Among the individual indicators, the highest changes came from Piped Water on Premises and Access to Electricity.

UNICEF reports that Botswana is one of five countries in the region that is on track to meet the MDG targets for reducing the proportion of the population without access to safe water.3

Liberia had the largest decrease in the Infrastructure dimension, falling by almost

27 points. The country is ranked lowest in Access to Sanitation, Piped Water on Premises, and Access to Safe Water, but it is the top performer for *Access to Electricity*.

- Electricity is said to be the single largest component of operational expenses in Liberia for large concessions, industries and businesses.
- In 2004, it was estimated that the water production rate in Monrovia was only 10 percent of the water production rate in 1990. Further, USAID reports that water supply and sanitation have seriously deteriorated because of 14 years of civil war.
- The country is facing rapid population growth in its cities, particularly in the capital city of Monrovia, with a growth rate of 121 percent since 1996. Cities served as places of refuge for people from the rural areas and small towns who had to abandon their homes. The unrest caused the water supply rate to drop significantly in Monrovia.
- In 2004, it was estimated that the water production rate in Monrovia was only 10 percent of the water production rate in 1990.4

Urban Poverty

Niger performed the best in this

-20

dimension. The country reported significant improvements in the *Infant Mortality* rates. with an HCI increase of 27 points for the indicator. Per capita income has increased by 10 percent (\$894) and the urban population has increased by 132 percent.

- · A government policy that has excluded mothers and children under five from health user fees may have contributed to the success.5
- Niger is still considered one of the poorest countries in the world today. It was ranked last out of 188 countries in the 2015 HDI.

Sustainability

The average HCI change for the region is 3.7. The top performers are Malawi (+28), Kenya (+26), and Zimbabwe (+24). While the worst performers were Rwanda (-43). Liberia (-42) and Ethiopia (-27). Thirty of the 42 countries improved in the dimension.

In the Sustainability dimension, Kenya had the second highest score in the region. The country's total electricity production from renewable sources went up from 12 percent in 1996 to 23 percent in 2012, with just a 20 percent increase in GDP per capita.

- Today Kenya has the largest renewable energy sector in Africa. The country's primary source of electricity comes from hydroelectric generation, which is excluded in the data source.
- A new public-private partnership aims to put 34 new wind farms into operation in the

coming years. Kenya has a high potential for wind energy production as the country has average wind speeds of 3-10 m/s.6

· Nevertheless, less than 20 percent of the total population has access to electricity. Demand is growing fast but provision is slowed by inefficiencies, theft, undiversified sources and the high cost of infrastructure development.7

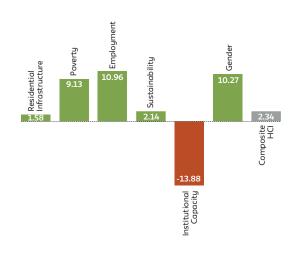
Ethiopia's score decreased by 27 points in the Sustainability dimension. Though income has nearly doubled since 1996, the raw indicators for the Sustainability dimension have decreased over time.

• Seventy-seven percent of the country's population lack access to electricity. This means a heavy reliance on fuelwood and charcoal, which brings about widespread

land degradation, exposing bare soil to erosive rainfall.8

• Ethiopia's electricity production from renewable sources as a percentage of total production has dropped significantly despite some efforts to invest in renewable sources of energy. The country has made it clear in the Growth and Transformation Plan that renewable energy will be a key economic driver of the country. however, inadequate infrastructure to transfer power means that the increase energy supply is not utilized efficiently.9





¹ Human Rights Watch, "Burundi," Human Rights Watch, Accessed July 8 2016. https://www.hrw.org/africa/burundi

2016. http://www.reegle.info/policy-and-regulatory-overviews/ET

² United Nations, "Malawi," UNDP - UNEP Poverty-Environment Initiative, June 2015, Accessed July 8, 2016. http://www.unpei.org/what-we-do/peicountries/malawi

³ United Nations, "Water, sanitation, hygiene," UNICEF, Accessed July 8, 2016. http://www.unicef.org/esaro/5479_water_sanitation_hygiene.html 4 USAID, "Liberia: Water and Sanitation Profile," USAID from the American People, Accessed July 8, 2016. http://pdf.usaid.gov/pdf_docs/Pnado932.

⁵ Our Africa, "Niger: Poverty & Healthcare," Our Africa, Accessed July 8, 2016. http://www.our-africa.org/niger/poverty-healthcare

⁶ Sherelle Jacobs, "Electrifying Kenya: How one African Country is Approaching Renewable Energy Development," Renewable Energy World, October 8, 2014. Accessed July 10, 2016. http://www. renewableenergyworld.com/articles/print/volume-17/issue-5/solar-energy/ electrifying-keyna-how-one-african-country-is-approaching-renewableenergy-development.html

⁷ Invested Development, "Energy in Kenya and the Potential for Renewables," Invested Development, August 30, 2012, Accessed July 10, 2016. http://investeddevelopment.com/blog/2012/08/energy-in-kenya-andthe-potential-for-renewables/

⁸ Katie Auth, "Ethiopia's renewable energy revolution shouldn't fail to empower its poor," The Guardian, January 30, 2014, Accessed July 10, 2016. https://www.theguardian.com/global-development-professionalsnetwork/2014/jan/30/ethiopia-renewable-energy-project 9 REEEP Policy Database, "Ethiopia (2014)," Reegle, Accessed July 10,



BACKGROUND CONTEXT

At the 1996 Habitat II Conference, countries committed themselves to "the goal of gender equality in human settlements development".1 To achieve this goal a number of fundamental commitments were made, such as 'integrating gender perspectives in human settlements related legislation, policies, programmes and projects through the application of gendersensitive analysis; collecting, analyzing and disseminating gender-disaggregated data and information on human settlements issues, and "formulating and strengthening policies and practices to promote the full and equal participation of women in human settlements planning and decision-making".2 How far have countries advanced in achieving such ambitious commitments? To measure progress made in achieving greater gender equality, the New School study sought to analyze the urban performance relative to a country's GDP per capita on a number of gender specific indicators relating to employment, government, poverty, land

ownership, health, and education.

MAIN FINDINGS

The regression analysis revealed, counter intuitively, that there was limited statistical relationship between gender specific indicators and GDP performance. The most important results were the following:

- Only three out of the 46 indicators that were analyzed fulfilled HCI requirements and showed a significant relationship to GDP per capita. The three indicators were:
- 1. Share of women in employment in the non-agricultural sector (% of total non-agricultural employment)
- 2. Lifetime Risk of Maternal Mortality
- 3. Tertiary Education
- Only 95 of the 183 analyzed countries reported data on all three indicators.
- A composite HCI score of the three indicators revealed increased performances in 84% of the 95 countries. Countries that made the largest improvements since Habitat II in the three HCI gender indicators are Turkey, Yemen, Greece, Iceland, and Mongolia. Countries that performed worse in recent years than in 1996 are Israel, Georgia, Morocco, Egypt, and Panama.
- Globally, among the three indicators, the HCI of tertiary education improved the most significantly with an increase of 22 points since Habitat II. The HCI of no lifetime risk of maternal death increased by 4.1 points, the HCI of non-agricultural employment increased by 1.33 points.

The regression analysis is visually

presented in Figure 1. The graph on the left side shows no correlation between GDP per capita and female unemployment with secondary education; the graph on the right shows a strong correlation between GDP per capita and the inverse of the indicator maternal death.

FINDINGS FROM HCI INDICATORS

Employment

The HCl of the indicator 'Share of women in employment in the non-agricultural sector' (% of total nonagricultural employment) shows significant changes since Habitat II. Among the 120 countries observed, Yemen shows the greatest increase of the HCI with 64 points. HCI scores of Turkey, Cambodia, Lesotho, and Zambia have also increased significantly by around 25 points. At the other end of the spectrum are Israel, the Dominican Republic, Morocco, and Ethiopia, who experienced decreasing HCI scores by more than 50 points. Among the top performers in recent years (countries with HCI scores larger than 98) are Argentina, Lesotho, Puerto Rico, and Germany. Countries that scored lowest in most recent vears are Pakistan, Bhutan, Tanzania, Zimbabwe, and Madagascar.

Health

Since 1996 Habitat II, the 'Lifetime risk of maternal mortality' indicator has been widely and consistently reported, with a total of 184 nations collecting data on maternal mortality, and a total of 3661 observations. Low-income countries have higher overall reporting with all nations reporting statistics at least once between 1996 and 2015.

Ultimately it is the inverse of the indicator. namely 'No risk of maternal mortality' that is considered desirable. The global average performance for 'No Risk' is relatively high, with an HCI of 84. Ranking lowest are the Sub-Saharan African countries: Europe and Central Asia rank highest. Among lowincome countries. Sierra Leone ranks lowest with an HCI of 83. Burkina Faso, although a low-income country, has one of the highest HCI scores with 98.

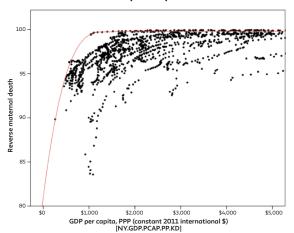
Education

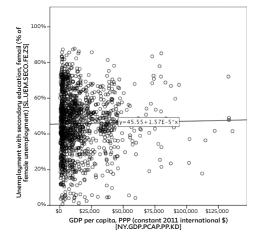
Data on the 'Gross enrollment in tertiary education. % female' indicator has also been collected consistently since Habitat II with 183 countries reporting 2075 observations since 1996. In recent years, Europe scored highest of all regions; Sub Saharan Africa scored lowest. Among low-income countries Indonesia is the highest performer with an HCI of 33. Chad the lowest with an HCI of 0.6. Changes since Habitat II are remarkable; Albania increased its HCI for tertiary enrollment by 75 points, Iceland by 65 points, and Chile by 56 points. Some countries, however, experienced lower performances; Georgia decreased its HCI by 38 points, Panama by 12 points, and the Philippines by about 2 points. Overall, only 10 countries showed decreasing HCI scores in tertiary education. Top performing countries in most recent years were the United States of America, Ukraine, Australia, Finland, and Greece.

FINDINGS FROM NON-HCI **INDICATORS**

Given that only three out of the 46 indicators

Figure 1. Female Unemployment with Secondary Education (left) and Lifetime Risk of Maternal Death (right) correlated with GDP per capita





listed in Annex 1 showed a relationship with GDP per capita, it can be assumed that there are factors other than GDP per capita that affect gender equality. This section provides insights into three further key indicators that while not showing a relationship with GDP per capita,

nevertheless are important given their relevance to the Habitat II commitments.

Representation in government and leading positions

The importance of the indicator 'Proportion of seats held by women in national parliaments' is widely recognized, with approximately 185 countries collecting data since 1990. Although the indicator shows significant improvements since 1996. overall findings are disappointing. Globally, across all GDP per capita categories, women occupy less than 15% of seats in parliament in the majority of countries. The country that reported the most seats was Rwanda in 2014 with 64%, closely followed by Bolivia, Cuba, Sweden, and Senegal, At the other end, the Middle East did not report a single female legislator since Habitat II. The second indicator in this commitment category is 'Female legislators, senior officials, and managers'. A total of 118 countries reported data on this indicator between 1990 and 2015, with middle and high-income countries collecting more data than lower income countries. The global average at 29% is low, with most observations ranging between 11 and 50%. Hungary reported the highest number in 1996 (64%).

Urban land / housing ownership

Embedded in the Habitat II Declaration is the development of human settlements. housing, and access to land. This means that the most important gender indicator for the Habitat Agenda undoubtedly is 'Urban land ownership', which refers to

female housing ownership, either jointly or singly. Despite the commitment to gender disaggregated data, few countries have collected data on this indicator since Habitat II. with a total of 42 observations recorded, mostly in African countries. This may be a consequence of the fact that his is a relatively 'new' or 'young' indicator with countries reporting on it for the first time in 2010. Results are shockingly low; as depicted in Figure 2, the majority of the countries reported female land ownership rates of less than 10%. Cameroon reported the highest achievements with 25.8% in 2011; Jordan reported a 0% land or housing ownership by women.

Female household headship

Although countries started to collect data on 'Female household headship' in 1996, since then only 192 observations have been recorded, mostly in lower middleincome countries. The global average for this indicator is 24%; the maximum point reached over the twenty-year period is 49%. The fact that the majority of countries that have reported high rates of female headship are post crisis / post conflict countries, may bias conclusions from this indicator. In 2011, women headed 44.6% of households in Zimbabwe, 40.6% in Haiti (2012), 40% in the Dominican Republic (2013), 34% in Colombia (2010), and 28.1% in Honduras (2012). The assumption that a high rate of female headship is positive and desirable may therefore not hold true for lower-income and post conflict countries where headship in single female headed households can indicate high levels of poverty.3,4

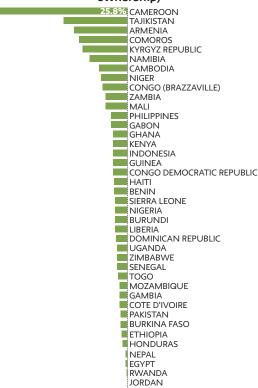
PRELIMINARY CONCLUSIONS

This New School study has found that indicators of improvements in gender equality only depend to a limited extent on a country's GDP capacity. Performance since Habitat II is mixed: while some countries show significant progress, others have performed worse in recent years than was the case in 1996. The composite gender HCI suggests that Turkey made the greatest improvements in the three HCI indicators relative to its capacity, followed by Yemen. Greece, Iceland, and Mongolia. Since Habitat II, Turkey's composite gender HCI increased from 44 to 75 points, an increase of about 31 points. Turkey's improvement can largely be attributed to increases in the gender education HCI, which increased by 53 points. Turkey's gender employment HCI improved significantly too, by about 36 points, while its gender health HCI increased only slightly, by 3.3 points.

Georgia, Morocco, and Egypt on the other hand performed significantly worse in all three gender HCI indicators recent years than in 1996, with a decreasing HCI score by more than 12 points. Israel had the largest drop by about 20 points, decreasing from 82 points in 1996 to 62 points in 2013. Israel's decrease can largely be attributed to its drastic drop in the HCI of female nonagricultural employment (-79 points); the HCI of lifetime risk of maternal risk remained unchanged (0.17), the gender education HCI even increased (21 points).

Considering the poor performance of countries in female land ownership and

Figure 2. Female urban land ownership, jointly or alone (in percentage of total land ownership)



* Own a house alone or jointly

representation in governments and legislative positions, the New Urban Agenda should pay particular attention to the lack of gender disaggregated urban data in these areas, and facilitate the collection and analysis of such data.

¹ United Nations, "Report of the United Nations Conference on Human Settlements (HABITAT II)," *UN Habitat*, 1996, p. 28

² Ibid., p. 29

³ Kimenyi, Mwangi S., and Mbaku John Mukum. "Female Headship, Feminization of Poverty and Welfare." Southern Economic Journal 62, no. 1 (1995): 44-52.

⁴ Chant, Sylvia H. (2003). Female household headship and the feminisation of poverty: facts, fictions and forward strategies [Online], January 2006. Accessed July 8, 2016. http://eprints.lse.ac.uk/ archive/00000574

HABITAT IN DEBT: 20 YEARS OF URBAN **POLICY IN LATIN AMERICA**

Qualitative studies in Argentina, Brazil, Chile, Colombia, Ecuador, and Mexico

Maria Carrizosa

This section presents the transversal findings of a parallel project carried out by The New School's Observatory on Latin America (OLA), in close collaboration with the Global Urban Futures Project. In the interest of complementing the quantitative assessment described in this booklet. the group wanted to engage in a closer, qualitative look at country trajectories, an assessment to give more texture to the general findings of the HCI. We like to believe this two-pronged approach, with both quantitative and qualitative elements, is useful to better assess the "Old Urban" Agenda" that is being replaced by the New Urban Agenda. Hence, while the quantitative assessment explored the change in the performance of 15 indicators in 169 countries, this qualitative assessment focused exclusively in six countries Argentina, Brazil, Chile, Colombia, Ecuador, and Mexico, whose total population



represent almost 70% of the region. Jointly, both types of assessments share the common goal of evaluating the performance of the Habitat II agenda, in order to strengthen, indirectly, the accountability and policy impact of the Habitat III Agenda.

OLA commissioned to six highly recognized Latin American experts, a document that would assess the progress each of their countries had during the last two decades with regards to the Habitat Agenda. We invited them to produce texts halfway through between a critical report and an essay, in the interest of, instead of reproducing the official national reports. bring to them a more profound and textured, non-bureaucratic perspective. The Argentina text was developed by Eduardo Reese and Andrea Catenazzi, Brazil's by Edesio Fernandes, the Colombia one was developed by Jorge Torres, Chile's was written by Alfredo Rodríguez and Paula

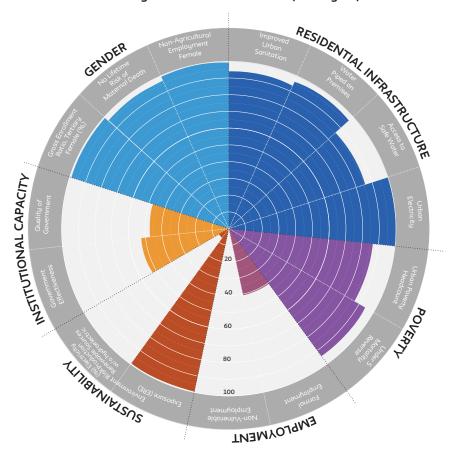
Rodríguez, the Ecuadorian document was done by Fernando Carrión and Alexandra Velasco, and Mexico's by Alicia Ziccardi. These texts, both individually and collectively, represent an important contribution to the urban studies literature. both in Latin America and globally, which is why they are all being published as a book1. Of course, it is a very complex endeavor to summarize the wealth and breadth of the work these authors have developed. Any such effort risks missing crucial details and precision in favor of an expanded horizon, and this is not the exception. What will be presented here is a list of eight transversal findings that we believe encapsulate the most important messages from the Latin American experience to the global discussion.

¹Cohen M., Carrizosa M., and Gutman M., eds, (2016), Hábitat en deuda: veinte años de políticas urbanas en America Latina, Editorial Café de las Ciudades, Buenos Aires,

1. Housing Policy Undermines Urban Policy

Not only has housing policy replaced urban policy, it has acted against urban policy objectives like densification, sustainability, curbing intra-urban inequality, and pursuing efficiency in public expenditures. What good is to provide housing for the poor that is disconnected from work and urban services and has poor quality? Very little. These country studies confirm that housing

Argentina: HCI Performance (latest year)



policy worsened urbanization patterns and led to perverse investments via the phenomenon that has been cleverly called: "houses without people" for people without houses. What happens is that the poor vote with their feet and abandon newly constructed projects. Data collected across these qualitative studies point that in Chile there are one million empty units of public housing, in Mexico five million, and in Brazil almost six. At stake is nothing less than a Pruitt-Igoe of the South. For instance, Chile, once a celebrated housing model, began in 2013 a program to demolish thousands public houses. A similar story is happening in Mexico, where during the 40 years without urban policy the result was: "lots of housing, but little city" (Ziccardi, 2016). The final outcome is, then, partially vacant housing projects with urban violence problems, transport issues, and jobhousing disconnect. The lesson that these governments are learning right now is that housing policy should not inform urban policy, but vice-versa. "Without urban policy, government action can worsen urbanization patterns" (Fernandes, 2016). More still, when housing takes over urban policy, it betrays its own purpose and fails to be instrumental for social policy: it fails to serve as a tool against poverty (Torres, 2016).

2. The Power of Private **Developers**

Housing policy's leading model in the region follows the simple formula: credit + savings + subsidy. In all cases, this was accompanied with a shrunken state that steps back and prefers to acts solely as a facilitator. What this produced was a policy in which, indirectly, not only the market but also subsidies dictate urbanization patterns. A fundamental insight regarding subsidies is that the "subsidies to demand" model is actually subsidizing the supply. The state, by channeling subsidies to the buyers, is really subsidizing the construction companies. Hence, it's imperative that we stop calling them "subsidies to the demand", when the real winners are the developers. The suppliers are so comfortable with the injection of resources, that they are somehow impervious to the real needs of the population: there is little diversity in the types of housing and tenancy options offered. Single-family housing for families of three to four members prevail, but the fact of the matter is that this demographic trends show a rise of both expanded and single homes, as well as the need for more rental housing alternatives.

An analysis of the composition of the national housing deficit is illuminating. In every case the qualitative deficit is higher than the quantitative deficit, and yet the resources for upgrading are not proportional to these numbers. For instance, in Colombia

75% of the deficit is qualitative, yet only 16% of public resources go for upgrading policy. Additionally, housing policy is not capable of making the two types of deficit interact efficiently. Instead of offering new housing via addressing the qualitative deficit (by subdivision, addition, or second housing in upper floors), the newly built housing stock, because of its poor quality, immediately adds to the qualitative deficit the government has to take care of. It's as if the government is digging a hole to cover another hole.

3. Fragility and Short-lived Nature of Achievements

Another shared conclusion across countries is that success in policy reform is fragile: slow, short-lived, and weak. For example, in Argentina, the "Habitat Argentina" initiative, by which NGOs, community organizations, academia, and national and local legislators joined efforts to articulate demands for a just habitat, is facing now an adverse deregulatory environment. Also, Correa's 10-year long Citizen Revolution in Ecuador, is showing signs of fracture to a great extent due to the current economic crisis (low commodity prices in a dollarized economy). Another discouraging case is what happened to Colombia's Popular Housing Organizations (OPV by its Spanish acronym), which were legally

and financially enabled to operate social housing subsidies, but were pushed out of business by the -so called- "subsidies to the demand" model. The message, this time, is that policy reform takes time and much effort to achieve, but can readily fade away. The lesson here is that rights are hard to win but easy to lose; to destruct is easier than to construct.

4. Legal Structures, But **Little Implementation**

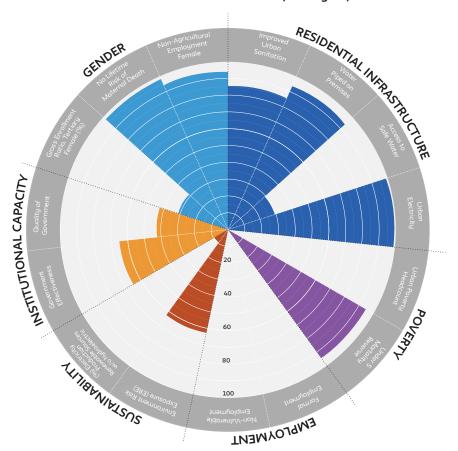
Evidence from across countries. and especially from those with an important tradition in urban legislation, demonstrate that laws and institutional mechanisms are not enough to guarantee effective implementation. Latin America has a legacy of elevating democratic urban principles to constitutional amendments. Brazil and Colombia are the best of such examples, having the "right to adequate housing", the "social and ecological function of land", and territorial planning for their municipalities, made compulsory under their constitutions. Perhaps because of this, it was especially troubling to learn of the backlashes in these two countries. Brazil, whose "City Statue" -decreed in 2001- and "Ministry of

Cities" -established in 2003- have been internationally celebrated as one of the most successful outcomes of the Habitat II Agenda, experiences notable problems. National urban policy remains sectorial and reflects an acute institutional and fragmentation. The Ministry of Cities does not seem to have

the same stature of other ministries. Indeed, it was the first to be disposed of with after Rousseff's impeachment, and even before being dismantled, it was "little more than clientelistic office" (Fernandes, 2016).

Likewise, in Colombia, the 1997 Law

Mexico: HCI Performance (latest year)



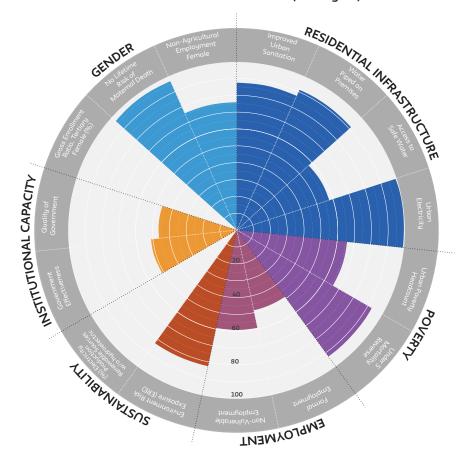
of Territorial Development represented an important legal feat. It is no minor accomplishment that 99% of municipalities today have issued their own territorial plans. However, upon a closer examination, most of these plans do not pass the simplest technical exam: more than half have problems defining the urban perimeter, some municipalities simply denied the existence of any rural land, and less than 12% makes use the legal instruments available to obtain resources from development rights. So, yes, almost all municipalities issued some kind of territorial development plan, this does not necessarily imply effective territorial planning. The situation is aggravated because, 89% of the more than 1,100 local administrations, are financially unviable (Torres, 2016). Ultimately, the message here is that legal, institutional and normative conquests alone do not guarantee effective implementation of urban policies.

5. Artificial **Decentralization**

Accounts from across six countries. seem to agree than decentralization has not met its high expectations, that it remains more nominal than real. After 30 years or more of actively promoting decentralization in Latin America, there has been much progress in transferring administrative responsibilities from the national to the local governments, but little progress in transferring institutional capacity (Ziccardi, 2016). Some authors assert that "local governments are strong opponents to national government, but weak within their jurisdiction" (Carrion and Velasco, 2016). Moreover, the Brazilian document claims it is senseless to give equal representation to all 5,500 municipalities, given their radically different realities. In fact, there are some small governments that prefer to depend on federal transfers instead of raising local revenue. Another facet of the decentralization problem metropolitanization, for which effective structures remain elusive. For example, Argentina still lacks a proper metropolitan normative framework to efficiently manage the Great Buenos Aires region. And in Brazil, there are up to 30 metropolitan areas currently

operating without any legal backup. In Colombia, despite the good experience of Medellin, Bogota (which concentrates 40% of the nation's GDP), is more often competing rather than collaborating with bordering municipalities. In the end, insights in this realm seem to question if the region's reliance in decentralization has been excessive.

Ecuador: HCI Performance (latest year)



6. Continuing Inequality

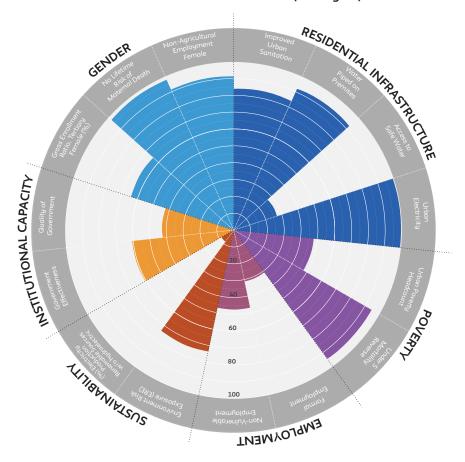
Latin America is the second most urbanized region in the world, and -despite efforts- the most unequal. So in broad terms, the balance is not a positive one. In fact, inequality has become so stark, that traditional indicators like the Gini, fail to describe it. For example, detailed studies on Chile's "lion's share", that is, between 1 and 0,01% of the people with highest incomes, show that the 1% receive more than 30% of the income; and the 0.01% receive more than 10%. What is most disturbing still, is that these differences are clearly visible in the cities. Countries may advance in curbing poverty, expanding urban services, and increasing education and health coverage, and those are important outcomes. But the problem is that "there can be social mobility, but it is not expressed in the territory" (Rodriguez, 2016). Ultimately, it is fair to say that intra-urban inequality is today a Latin American priority, not only because it is a problem in itself, but because of its chain effects in security, health, and productivity, to name a few.

7. Weakness of the Habitat Agenda

The six qualitative country studies show great variation in the member states' attitudes toward Habitat II and also in

its impact on the ground. The Agenda itself seems to have been relevant, leaving significant impacts in Mexico, Brazil, and Colombia. That is not the case for Argentina, Chile, and Ecuador, where impacts were not very visible. For instance, Mexico transformed its national urban policy and instruments

Colombia: HCI Performance (latest year)



after 1996. However, in practice, these reforms were poorly articulated among themselves and ultimately they revealed little real impact in the cities. Another example of the weak character of the implementation of the Habitat Agenda is Chile, a country that spent 13 years without a national urban policy, and when it was finally issued, it had no binding character, no budgetary allocations, and no monitoring indicators. More cases could be highlighted, however, the important lesson here is that unfortunately, urban institutions are feeble. When they exist, they are subordinate to other sectors, incapable -as was discussed earlier- of commanding housing policy, much less of establishing a dialogue with economic policy on equal terms.

Many have asked why the new urban agenda is being agreed by national governments without inviting city governments to the table, but few have asked why is it that nations fail to understand the true role of cities in a post-industrial world. Cities are at the same time *place*, *object*, and *instrument* of economic development. Yet, it is surprising how such a structural role passed unnoticed. And it is not clear how exactly will the New Urban Agenda make this better. By and large, it can be said that Habitat III has agreed the what. but the how still remains unclear.

8. A Need for a New **Urban Practice**

This "how" question is not only a fundamental one, but what is necessary is that its answer helps guide urban practice, a new urban practice. Twenty years ago it seemed impossible that a government could address its quantitative housing deficit. Today, we know it is possible. But more important still, we know this is not enough. Urban planners, traditional master plans, and often well-intended large strategic projects, have been "inadvertent hostages" (Fernandes, 2016) of the same exclusionary urban markets they hope to prevent. The authors of these studies largely agree that traditional urban practice is often unaware of how it affects real estate forces, how it acts as an exclusionary apparatus, even though it claims otherwise. It has also been repeatedly mentioned that current urban practices reproduce sector isolation and hinder inter-governmental collaboration. In addition, it's common to find urban plans plagued with obscure language and imprecise, unnecessary technicalities, that thwart their implementation. Given this situation, what kind of new urban practice is needed?

Jaime Lerner, former mayor of Curitiba keenly expressed that in sound urban practice: "a solution solves more than one problem at a time". This might be one of the most important lessons for the new urban practice. Problems are interdependent, so solutions should also be interdependent. For example, neighborhood day care centers can be key components curbing informal employment. Or, a waste management project can simultaneously tackle income, public space, climate change, innovation, and preventive health. In this localized and networked urban environment, what kind of urban professional is needed?

The qualitative assessments done in this project remind us that it is important to stop repeating principles that nobody objects to in the abstract but no one can claim in practice. What we urgently need are new integral urban practices that weave actors through sectors and that are sensibly rooted in local realities. Networked solutions, with symbiotic relationships between administrative and disciplinary realms, where collective intelligence is put at the service of a just sustainable urban development.

CONCLUSION

The results of the Habitat Commitment Index show that in the 20 years since Habitat II, progress towards meeting the goals set forth in the Istanbul Declaration has been in many ways disappointing. Though some countries have made commendable advancements. such as Turkey, Portugal, and Tanzania, progress for much of the world has been small or negligible, and most worrisome, the performance of a number of countries has even declined. While progress has been made in some areas—in the Gender dimension, for example—others, such as Institutional Capacity are far worse, and for the most part the gaps that existed in 1996 between countries' actual performance and potential performance have stayed the same. Even using the HCI methodology, which adjusts for differing levels of economic resources, most countries are still underperforming in meeting the commitments agreed upon twenty years ago.

As the world prepares for Habitat III, it is imperative that the shortcomings of Istanbul not be repeated in Quito. The HCI has demonstrated that despite the Habitat Agenda's 241 paragraphs containing over 600 recommendations, there has been little meaningful change in urban conditions since Habitat II. Like the Istanbul declaration, the revised version of the Zero Draft of the New Urban Agenda mentions the word "commit" more than 50 times, yet lacks specific targets, priorities, or mechanisms for



monitoring and assessment.

The Habitat Commitment Index underscores the need for realistic, prioritized goals, and agreed upon measures of success and data collection. One of the greatest obstacles in constructing the HCI was the dearth of disaggregated urban data that have been collected during the period since Habitat II. In many ways, the process of creating the HCI has itself been almost as revealing as the results. Of the many commitments adopted in Istanbul, urban data are available for remarkably few, and even among those, they have often been collected either so infrequently or among such a small sample size of countries that drawing any meaningful conclusions at the global level has been impossible.

The Habitat Commitment Index also shows that the New Urban Agenda must carefully take into account the roles of both policy and economic growth in formulating commitments and setting benchmarks for

progress. The HCI process has revealed that the relationship between economic growth and indicators is highly variable. Some indicators are more responsive to economic growth, while others remain largely unchanged or may even decline. What the HCI demonstrates is that national economic growth alone cannot be depended on to meet the goals of the New Urban Agenda or to improve the livelihoods of the almost four billion urban residents worldwide.

However, urban policy reform and institutional development have both proven to be fragile in many countries. Frequently, advances at the national and city levels have stalled or reversed, with little evidence that urban living conditions and employment opportunities have improved over time. The HCI results have shown that in many countries, despite sustained economic growth and advancements across several dimensions, perceptions of the effectiveness of governments have fallen dramatically

since Habitat II. The New Urban Agenda should take into account the critical role of institutions in meeting the goals and objectives of the agreement, and prioritize increasing institutional capacity.

Above all, the results of the Habitat Commitment Index have shown a troubling lack of commitment on the part of countries towards meeting the goals and objectives of Habitat II. Istanbul was lauded for its inclusiveness, but neglected to adopt any mechanisms for accountability, and the evidence from the HCI suggests that much more effort could have been made toward fulfilling commitments. The New Urban Agenda must ensure that the decisions and agreements made in Quito do not stay in Quito, but make positive and meaningful contributions to global urban livelihoods for the next two decades and beyond.

NEXT STEPS

The Global Urban Futures team plans to continue and expand the Habitat Commitment Index process. Our future efforts include:

- · Continuously searching for, testing, and adding new indicators and data sets to improve the robustness and comprehensiveness of the index to better reflect the goals of Habitat II
- Identifying various non-GDP factors that may explain for differences between actual and predicted performance, including public investment, urbanization rates, foreign aid, etc.

- Identifying the best practices of the highest scoring countries in the HCI analysis and inform policies to assist those countries that are struggling to make progress
- · Continuing to advocate for more comprehensive and sophisticated urban data collection in the run up to Habitat III and afterwards
- · Creating a modified HCI to reflect the final outcomes of the New Urban Agenda adopted at Habitat III, and continuing to track yearly progress towards the New Urban Agenda's goals and commitments.
- Extending the HCI method from the national to the city and metropolitan level, to evaluate intra-country urban performance.

APPENDIX

Methodology: Calculating the HCI

The HCI is constructed using a process adapted from the SERF methodology developed by Fukuda-Parr et al. in Fulfilling Economic and Social Rights. 1 While we used the SERF methodology for creating achievement possibility frontiers to predict maximum performance levels based on income, the HCI uses a larger number of indicators and also expands the SERF methodology to address changes over time.

- For each indicator the data are plotted in relationship to the country's per capita GDP (PPP, 2011 International Dollars), using all available data from 1995 to present.
- · Frontier points along the outer edge of the plot are identified using visual inspection, with the requirement that the frontier include observations from a minimum of four countries.
- Econometric methods are used to specify the frontier, considering multiple functional forms—linear, logarithmic, inverse, quadratic, power, growth, and exponential, etc. The best fit relationship is determined by statistical measures of goodness of fit (R²), and visual inspection of the shape.
- The function plateaus at a point where the frontier indicates per capita GDP is



high enough that countries at that level and beyond are capable of full or near-full achievement of the indicator.

• Indicator values (X) are rescaled as a percentage of achievement between the lowest level of achievement recorded by any country at any income (X_m), and the maximum possible level of achievement for the country's per capita GDP, as calculated by the Achievement Possibilities Frontier (X,).

A problem arises for instance where a country's per capita income has met, and continued to grow beyond, the point which is determined to be sufficient to fully achieve an indicator. In these circumstances, the more that income rises above the point at which total fulfillment is possible without having actually achieved total fulfillment reflects a greater lack of commitment at the country level. Therefore, a country with capacity far beyond what is needed for total fulfillment of an indicator should be held

to a higher standard than countries at or just above the level of income required for maximum achievement.

To reflect this in the HCI, for countries with per capita GDP above the level at which the function plateaus, Y_n, scores are adjusted downwards as per capita GDP increases without achieving complete fulfillment of the indicator. The adjustment uses the following equation, with Y being the country's per capita GDP, Y_n being the per capita GDP level at which the frontier plateaus, S being the rescaled score, and ß is fixed at 0.5.

$$A = 100 \left[\left(\frac{S}{100} \right)^{(Y/Y_p)^{\hat{S}}} \right]$$

This mathematic formula for adjusting scores for countries with incomes above the point at which full achievement should have been possible was selected by Fukuda-Parr et. al for several reasons:

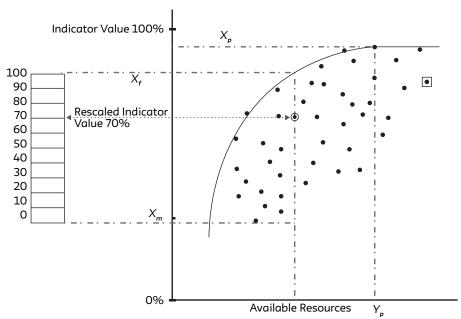
- No Penalty on 100% Fulfillment For countries that have achieved total fulfillment of an indicator, there is no inappropriate penalty for continued economic growth.
- Asymptotic Equality The adjusted performance score approaches the observed indicator score as the value of the resource capacity indicator approaches Y from above, ensuring there is no rapid drop in scores when a country's income reaches Y_p .
- Increasing Penalty with Resource Capacity - The downward adjustment of scores increases as income grows beyond Y_a. Two countries with sufficient capacity to

fulfill an indicator and the same raw score will be scored differently according to the extent to which income exceeds Y_n.

- Penalty Decreases with Rising Yp **Values** - Higher Y_D values indicate lower feasible rates of transformation, and therefore a lower penalty.
- Penalty Declines with Increasing Achievement - as the adjusted scores approach 100, the penalty for failing to achieve total fulfillment becomes less severe.

¹ Fukuda-Parr, Sakiko, Terra Lawson-Remer, and Susan Randolph. Fulfilling social and economic rights. Oxford University Press, USA, 2015.





Global Urban Futures Project Contact Information

72 5th Ave, 7th Floor New York, NY 10011 +1 212 229 5600 ext. 1516 globalurbanfutures@newschool.edu @GUFPMilano www.globalurbanfutures.org

THE NEW SCHOOL

JRBAN

