

RESIDENTIAL INFRASTRUCTURE

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ABOUT THE HABITAT COMMITMENT INDEX

The Habitat Commitment Index is a composite score of the performance of 15 indicators at the country level that are essential to urban well-being, weighted by per capita GDP. It seeks to measure the fulfillment of commitments made by countries in the Habitat Agenda adopted at the Habitat II conference in 1996.

METHODOLOGY

The HCI takes into account all available historical data over the past 25 years to predict, at any income level, the maximum level of achievement a country may be expected to meet using a scale of 0 to 100, with 100 indicating not necessarily 100% fulfillment of an indicator, but 100% of the predicted maximum potential for a given per capita GDP.

The Habitat Commitment Index is based on the SERF methodology as described in *Fulfilling Social and Economic Rights* by Sakiko Fukuda-Parr, Terra Lawson-Remer, and Susan Randolph, published by Oxford University Press in 2015.

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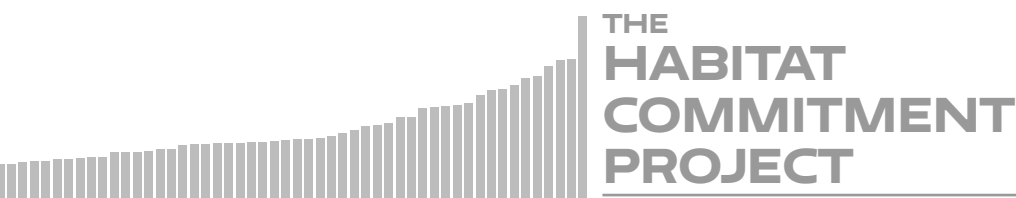


Figure 1: HCI Indicators and Dimensions

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			

I. MAIN FINDINGS

The *Residential Infrastructure* dimension of the HCI showed negligible improvement in the period between Habitat II and today, with no indicator increasing more than 3.5 points. Their starting points in 1996, however, were already amongst the highest performing indicators in 1996 (with the exception of the *Safe water* indicator), so there was less room for improvement. Some of the global averages for the indicators for *Residential Infrastructure* dimension were already in the high 80s or low 90s range. These findings suggest that closing the achievement gap between high performance and maximum performance in the HCI may be especially difficult. However, the findings also underscore the importance of identifying approaches to urban practice that can aid in extending residential infrastructure services.

II. HCI FINDINGS BY INDICATOR

The *Residential Infrastructure* dimension of the HCI established predicted performance levels for four indicators: *Urban piped water on premises*, *Urban access to electricity*, *Urban access to improved sanitation*, and *Water safety*. Although none of the four indicators showed decreases between the period under study, increases are, at best, negligible.

Urban Piped Water On Premises

Between the time of Habitat II and Habitat III, there was almost no improvement in the *Urban piped water on premises* indicator. In 1996 the indicator had an average HCI of 78.9, which by 2014 increased only to 79.5, with an improvement of +0.6 HCI points. Among the countries that showed exemplary improvements in the *Urban piped water on premises* indicator are Bahrain (+71.4), Oman (+59.7), Botswana (+46.0), Gabon (+34.4), and Cambodia (+25.3). On the other hand, among the countries performing worst in the indicator are Liberia (-77.6), Nigeria (-38.6), Mozambique (-29.9), Sudan (-29.8), Congo DR (-26.9), and Mongolia (-26.6).

Urban Access to Electricity

The indicator for *Urban access to electricity* showed moderate increases during the twenty year period under study. By 1996 the HCI for *Urban access to electricity* was 90.1 on average, while by the time of Habitat III the indicator's HCI average rose to 93.5, showing an increase of only +3.4 HCI points. Among the best performing countries during the period are Liberia (53.9), Thailand (37.2), Madagascar (37.0), Botswana (29.1), and the United Arab Emirates (29.9). On the other extreme, the countries performing the worst in *Urban access to electricity* are Equatorial Guinea (-18.9), Solomon Islands (-12.6), Zambia (-10.4), The Gambia (-9.6), and Mali (-9.2).

Urban Access to Improved Sanitation

The indicator for improved urban sanitation showed almost no change during the period between the Habitat conferences. In 1996, the indicator had an average HCI of 86.5, which improved only by +0.3 HCI points to reach 86.4 by 2016. The countries performing better in *Urban access to improved sanitation* were the Central African Republic (+21.6), Cambodia (+21.2), Micronesia (+19.2), and Mauritania (+17.5). Conversely, the countries showing the largest decreases were Equatorial Guinea (-27.6), Liberia (-18.0), Ethiopia (-17.9), Nigeria (-17.9), and Sudan (-17.3).

Water Safety

Between Habitat II and the most recent year data available, the *Water safety* indicator showed moderate increase. At the time of Habitat II, the indicator's average HCI was 48.7, while at the time of the Habitat III conference the indicator increased +2.8 HCI points, to reach 51.5 on average. The best performing countries were Malawi (+45.9), the Central African Republic (+28.2), Guinea (+21.4), and Paraguay (+19.4). On the other hand, the worst performing countries for the indicator were Liberia (-65.6), Rwanda (-29.3), Lao PDR (-27.4), Venezuela (-19.2), and Bhutan (-17.9).

III. POLICY RECOMMENDATIONS

Despite only small improvements in the *Residential Infrastructure* dimension, this dimension had some of the highest HCI scores, indicating that countries are performing at around 80% or more of their maximum capacity. These overall high HCI scores mean that there is potential to close the achievement and potential achievement gap and put countries on track towards full realization of targets for infrastructure delivery.

However, evidence suggests that as scores get closer to the predicted maximum, progress becomes more difficult. Therefore, countries should not be satisfied with high scores, but continue to strive for full achievement.

Of the countries that had declining scores, infrastructure services were extended, but not at the rate at which they could have been considering GDP growth. The fact that few countries (primarily those experiencing internal conflicts) had declining raw scores is promising. To close the performance gap, residential infrastructure provision should be provided at a higher rate relative to GDP growth.