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HABITAT COMMITMENT INDEX
ACCESS TO CLEAN, SAFE WATER

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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 fulfilment 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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INTRODUCTION

How have countries performed in providing clean and safe water over the last twenty years, given their available resources? To answer this question, the *Global Urban Futures Project* (GUF) at The New School University in New York has prepared this special report of the *Habitat Commitment Index* (HCI) with a focus on water. As part of the analysis, the GUF team created a compound Water HCI using the *Piped Water on Premises (urban)* indicator from UNICEF and the World Health Organization[1], and the *Improved Water Source (urban)* indicator from the World Bank[1]. The study was conducted to the sample of 169 countries included in the original HCI study presented at the Habitat III Conference, in Quito, Ecuador.

THE WATER HCI RESULTS

Globally, the provision of clean and safe water has largely remained at the same performance level since 1996, with no significant improvements. On average, in 1996 the global average Water HCI score was 63.67, meaning that the world was performing at around 64% of what could have been possible given the level of resources available at the time. By 2016, the world average Water HCI score increased to 65.35 points, meaning that the world improved its performance in relation to its available resources by only 1.68 HCI points.

Figure 1 shows a ranking of countries by their Water HCI score. Countries that experienced the largest improvements in their Water HCI score are Bahrain (+38.02 points), Oman (+32.52), Botswana (+24.03), Gabon (+20.54), and Paraguay (+20.23). Countries that performed worse in recent years than in 1996 are Liberia (-71.57), Rwanda (-23.04), Nigeria (-17.49), Sudan (-16.66), and Bhutan (-13.64).

Most strikingly, out of the 169 countries studied, 34% fall into the 'no change' category, meaning that over the last twenty years one-third of the countries have failed to improve the provision of clean and safe water. It should also be highlighted that 17.5% of the countries fall into the 'high increase' category, and 26.5% into the 'moderate increase' category, meaning that 44% of the countries achieved significant progress in providing clean and safe water. On the other hand, 12% of the countries fall into the category of 'moderate decrease,' 10% even showed a high decrease, meaning that 22% of the world countries are performing worse in recent years than in 1996 (see Figure 2).

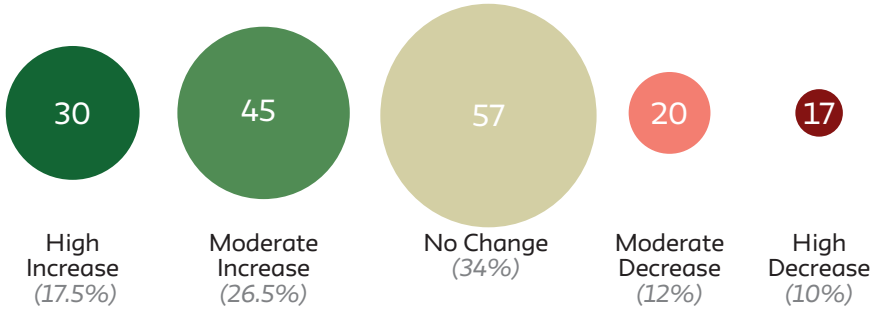
[1]UNICEF and WHO (2015), Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment, Geneva, 80 pages.
[2]The World Bank Open Data. http://data.worldbank.org/

FIGURE 1.
Water HCI Variation betweeen 1996-2016

38.02	Bahrain
32.52	Oman
24.03	Botswana
20.54	Gabon
20.23	Paraguay
19.90	Cambodia
17.40	Malawi
16.12	Guinea
14.13	Lesotho
11.86	Burundi
11.66	St. Lucia
11.47	Senegal
11.17	Gambia, The
10.61	Guatemala
10.42	Sri Lanka
10.01	Malaysia
9.88	Niger
9.65	Mauritania
9.63	Brazil
9.20	United Arab Emirates
9.15	Ecuador
8.76	Eritrea
8.16	Comoros
8.10	Benin
8.05	Bolivia
7.99	Kiribati
7.83	Estonia
7.81	Romania
7.58	Ethiopia
7.56	Cote d'Ivoire
7.48	Cabo Verde
7.43	El Salvador
7.38	Micronesia, Fed. Sts.
7.19	Qatar
6.70	Turkey
6.67	Mali
6.47	Mexico
6.46	Morocco
6.05	South Africa
5.80	Jamaica
5.64	Mauritius
5.45	Samoa
5.44	Bahamas, The
5.42	Swaziland
5.37	Lebanon
5.27	Grenada
5.25	Fiji
5.16	Peru
5.08	Burkina Faso
5.04	Argentina
4.86	Barbados
4.78	Croatia
4.61	Egypt, Arab Rep.
4.53	Vanuatu
4.48	Solomon Islands
4.40	Costa Rica
4.18	Madagascar
4.18	Zimbabwe
3.77	Russian Federation
3.77	Lithuania
3.74	Belize
3.63	Czech Republic
3.62	Djibouti
3.54	Philippines
3.28	Cuba
3.23	Hungary

FIGURE 2.

Total Countries Water HCI Change Distribution



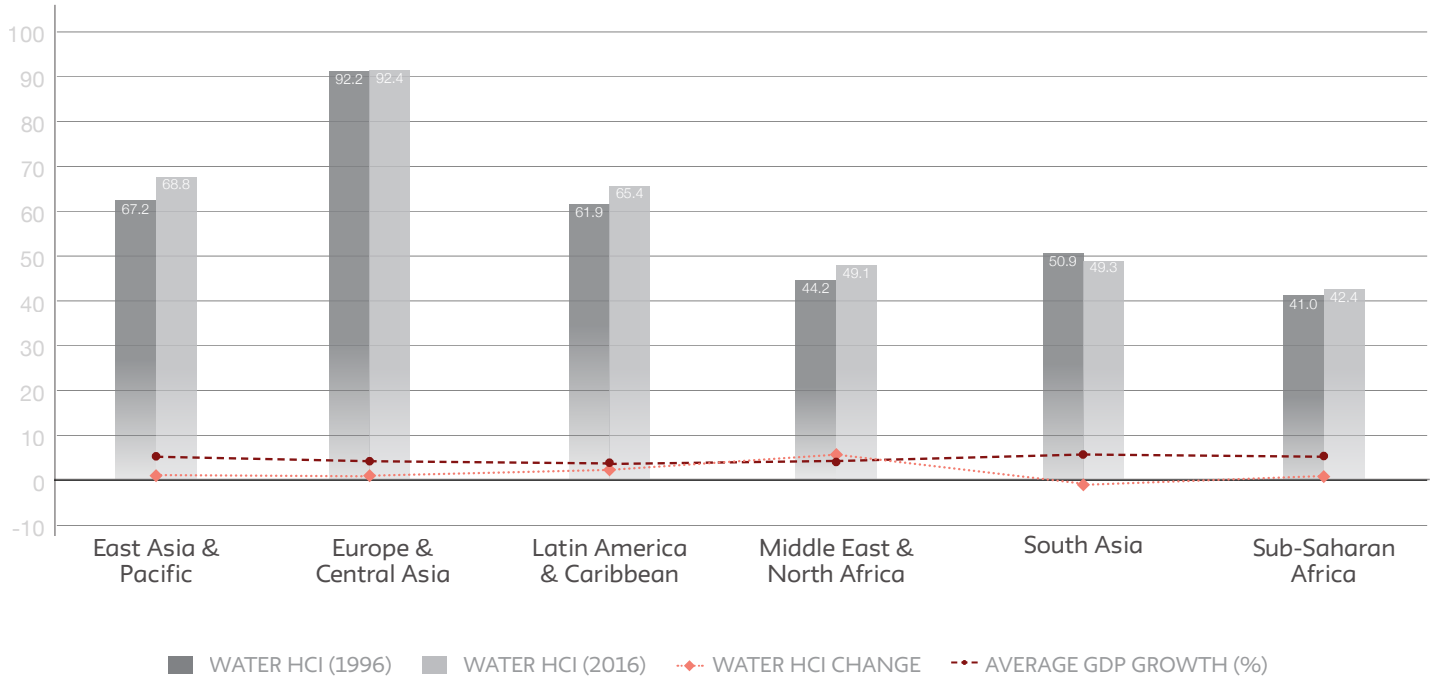
Furthermore, the study sought to identify whether economic growth is a sufficient condition to improve safe and clean water provision. Figure 3 shows the Water HCI change and the average GDP growth by region over the twenty-year period. The case of South Asia is particularly striking. South Asia is the region with the greatest average GDP growth between 1996 and 2015, but it is also the only region with decreasing average Water HCI scores. While economic growth is an important condition for improvements in quality urban water provision, this study suggests that there is a series of other factors influencing performance levels.

It should also be highlighted that the region of Middle East and North Africa is the only region in the world in which the Water HCI change is bigger than their average GDP growth, meaning that the region was able to improve its supply of clean and safe water at a higher rate than their economic growth. This finding suggests that the case of this region should be further studied aiming to identify what drove their improvements in clean and safe water.

3.22	Cameroon
3.11	Uruguay
3.06	Pakistan
2.79	Belarus
2.78	Portugal
2.72	Latvia
2.58	Guinea-Bissau
2.57	Kenya
2.51	Central African Republic
2.39	Sao Tome and Principe
2.37	Serbia
2.34	Togo
2.30	Finland
2.30	Nicaragua
2.25	Chile
2.09	Libya
1.89	Chad
1.54	Papua New Guinea
1.48	Tunisia
1.30	Ireland
1.23	Kazakhstan
1.20	Japan
1.15	Uganda
1.13	Kuwait
1.00	Saudi Arabia
0.99	Spain
0.66	Trinidad and Tobago
0.60	Greece
0.29	Thailand
0.26	Honduras
0.15	Bulgaria
0.03	Italy
0.00	Australia
0.00	Austria
0.00	Belgium
0.00	Brunei Darussalam
0.00	Canada
0.00	Cyprus
0.00	Denmark
0.00	France
0.00	Germany
0.00	Iceland
0.00	Israel
0.00	Korea, Rep.
0.00	Luxembourg
0.00	Malta

FIGURE 3.

Water HCI Change and Average GDP Growth by Region 1996 -2016



0.00	Netherlands
0.00	New Zealand
0.00	Norway
0.00	Singapore
0.00	Sweden
0.00	Switzerland
0.00	United Kingdom
-0.29	Iran, Islamic Rep.
-0.32	Slovenia
-0.36	Poland
-0.37	Montenegro
-0.64	Nepal
-0.72	United States
-0.89	Azerbaijan
-1.14	Guyana
-1.56	Macedonia, FYR
-1.78	Kyrgyz Republic
-1.95	Slovak Republic
-1.95	Georgia
-2.00	Haiti
-2.51	Equatorial Guinea
-2.58	Algeria
-2.68	Colombia
-2.68	Vietnam
-3.09	Jordan
-3.39	Panama
-3.41	India
-3.43	Yemen, Rep.
-3.44	Uzbekistan
-3.79	Congo, Rep.
-4.29	Bosnia and Herzegovina
-4.57	Namibia
-5.15	Moldova
-5.31	Armenia
-5.36	Bangladesh
-5.74	Zambia
-5.81	Indonesia
-6.18	Albania
-7.25	Ukraine
-7.28	Tanzania
-7.59	Ghana
-7.59	Lao PDR
-8.33	Sierra Leone
-8.42	Dominican Republic
-8.43	Venezuela, RB
-9.00	Iraq
-9.11	China
-9.21	Suriname
-9.67	Tajikistan
-10.92	Mozambique
-12.03	Mongolia
-12.92	Congo, Dem. Rep.
-13.64	Bhutan
-16.66	Sudan
-17.49	Nigeria
-23.04	Rwanda
-71.57	Liberia

A cross-country comparison helps to illustrate the relationship between economic growth and water provision performance. Paraguay and Cambodia started at the same level of performance in 1996, and over the last twenty years have been able to achieve similar levels of Water HCI Change (+20.2 and +19.9, respectively). However, Paraguay and Cambodia are countries with very different available resources. While Paraguay had a GDP per capita of $6,591 in 1996, Cambodia's GDP per capita was $1,124. This suggests that Cambodia did a remarkably superior effort than Paraguay in transforming their economic growth into improvements in water provision.

In yet another comparison, Paraguay and Swaziland are countries with the same level of available resources ($6,591 and $6,618 GDP per capita in 1996, respectively), and experienced similar average GDP growth between 1996 and 2016 (3.1% and 2.5%, respectively). However, during the period under study, Paraguay achieved a 20.2 point increase in their Water HCI score, while Swaziland improved by only 5.4 Water HCI points. As the cases of Paraguay and Swaziland show, countries with similar levels of available resources and similar patterns of economic growth can perform drastically different, suggesting that there are other factors influencing country performance in clean and safe water provision.

FIGURE 4.

Water HCI Change and Average GDP Growth for Paraguay, Cambodia & Swaziland 1996 -2016