

# Rural Migration News

## Blog 196

JANUARY 2021

### HDR 2020: The Age of Humans

The UN's Development Program has since 1990 issued an annual Human Development Report that explores a particular socioeconomic topic. The purpose of the HDR is to raise "awareness about human development around the world."

The 2020 HDR highlights the need to deal with the impacts of human activities on natural systems. The HDR warns that humankind is on the cusp of a new global epoch,

the Anthropocene or the era when human activities alter natural systems, perhaps irreversibly. The HDR calls for changing the trajectory of economic development to minimize competition between the needs of people and the needs of the planet.

The three-part report reviews the impacts of human activities on natural systems, lays out a framework to reduce the negative impacts of human activities on the environment,

and develops a revised Human Development Index that accounts for each country's impacts on the natural world.

#### Impacts

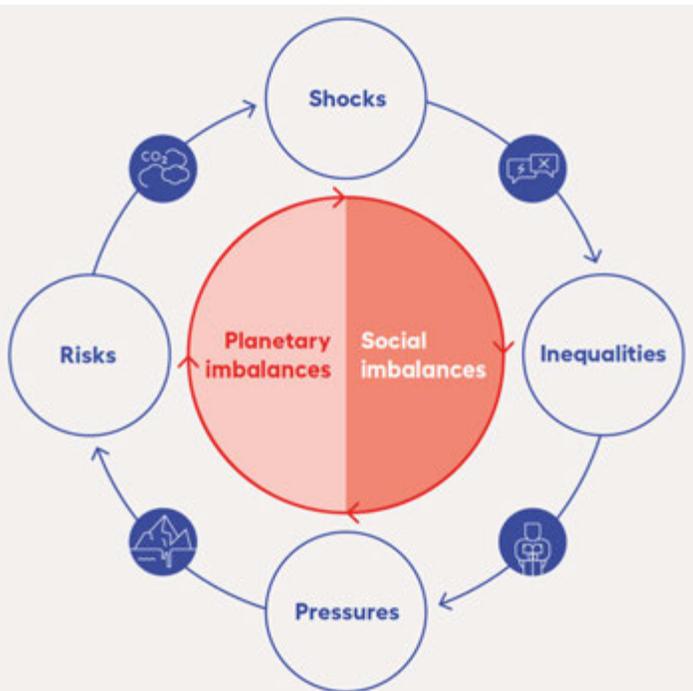
HDR 2020 argues that Covid-19, extreme weather events, wildfires, and species extinctions are nature's warning signs that are flashing red to suggest an urgent need to reduce human impacts on natural systems. The report argues that social inequalities aggravate planetary or natural imbalances, citing a list of indicators that range from declining social mobility to rising authoritarianism.

The current Holocene era began when the end of the ice age 12,000 years ago led to the rise of agriculture and civilization. During the Holocene era, humans adapted to nature. In the new Anthropocene era, human activities are reshaping nature.

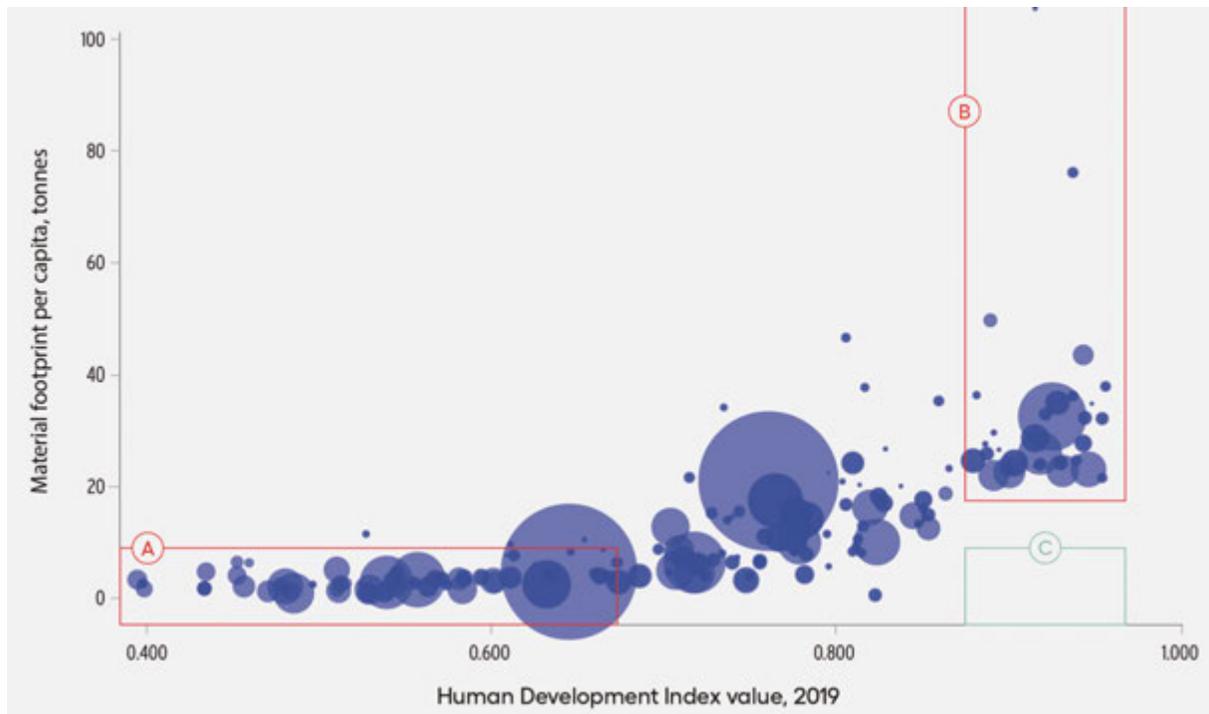
One of the best-known features of the HDR is its Human Development Index, which assembles indicators of health, education, and income to rank countries. The HDR argues that the empty rectangle C in the figure below is where countries should be, with a high HDI and a low material footprint on the environment. In fact, high HDI countries are in rectangle B with high material footprints. If the developing countries now in rectangle A move to B as well, the natural world will be changed.

The 2020 HDR includes a Planetary-Pressures Adjusted HDI that eliminates over 50 countries from the very high human development group because of their dependence on fossil fuels and materials that alter natural systems. The richer countries with high HDIs (dark green) rank significantly lower on the PP HDI because of their greater impacts on natural systems. Note that countries whose ranking on the HDI is the same as their ranking on the PP HDI are on the 45-degree line.

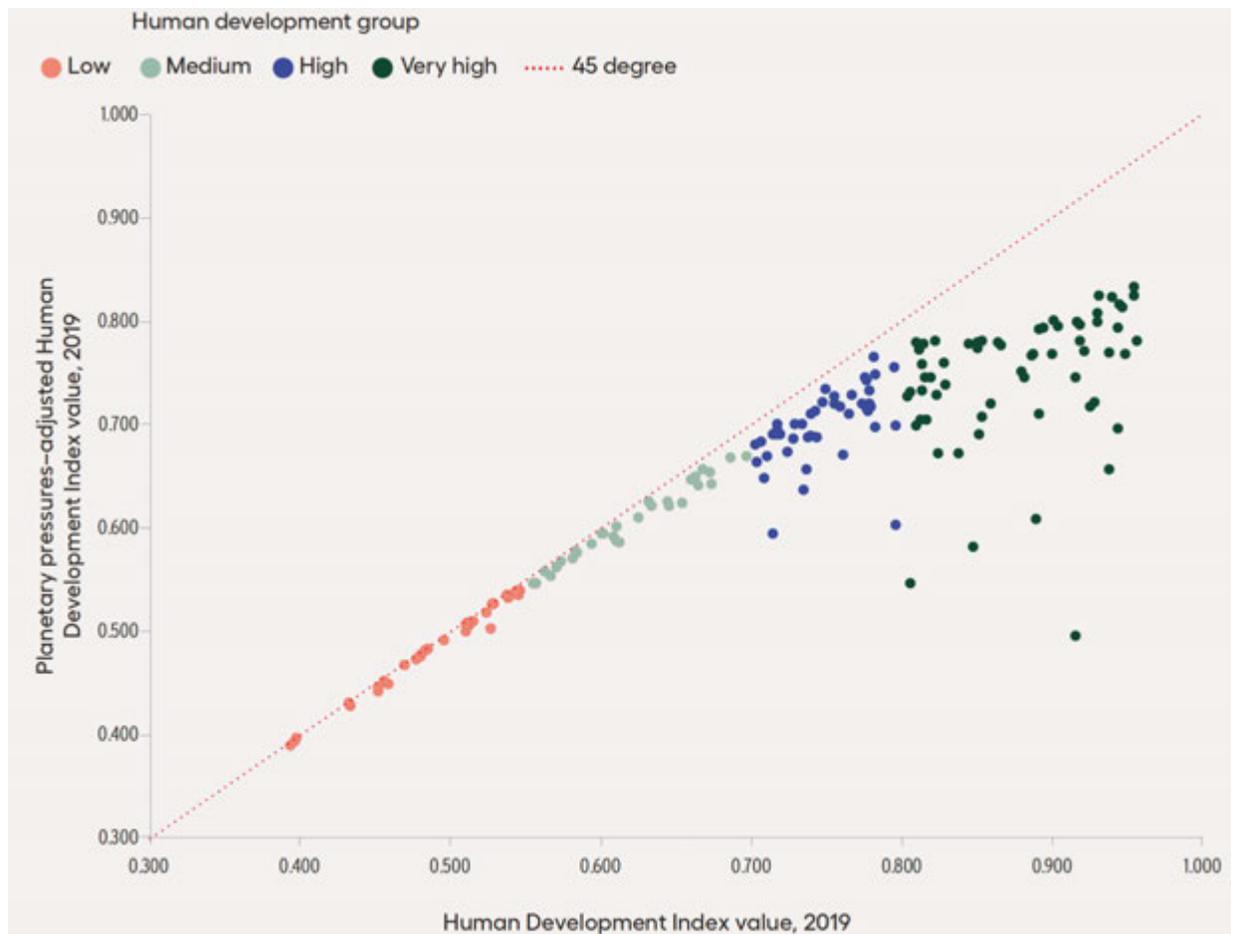
Social Inequalities Aggravate Natural Imbalances



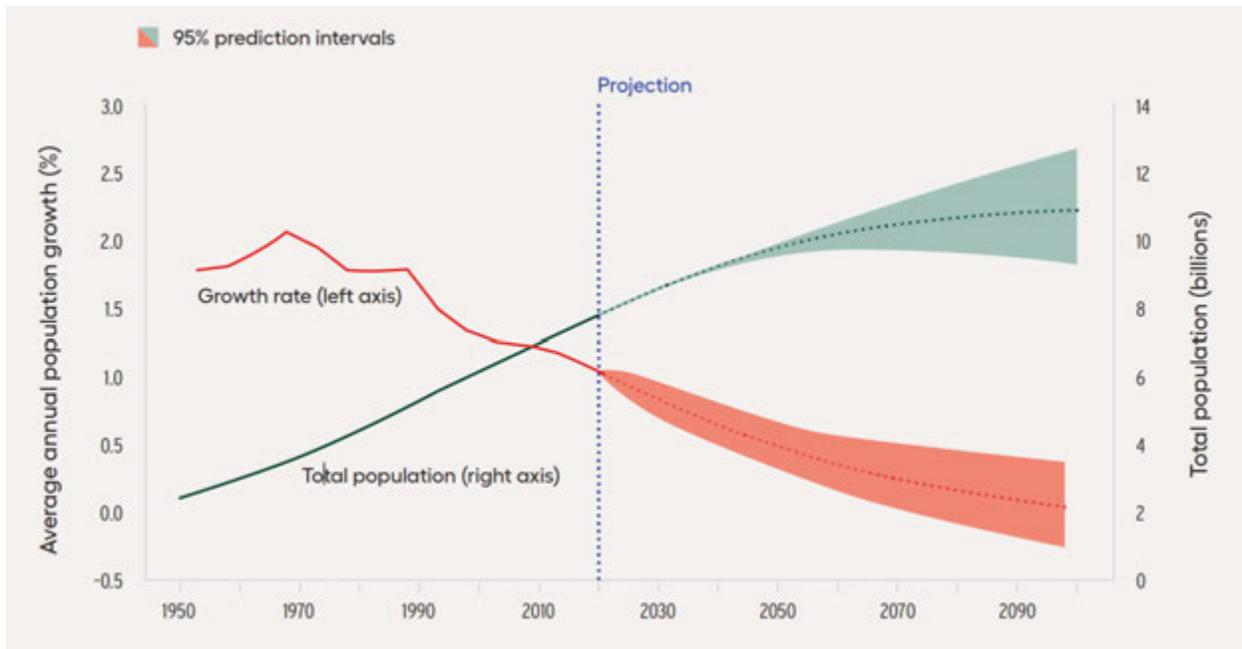
### Richer Countries With Higher HDIs (B) Have Larger Impacts on Natural Systems



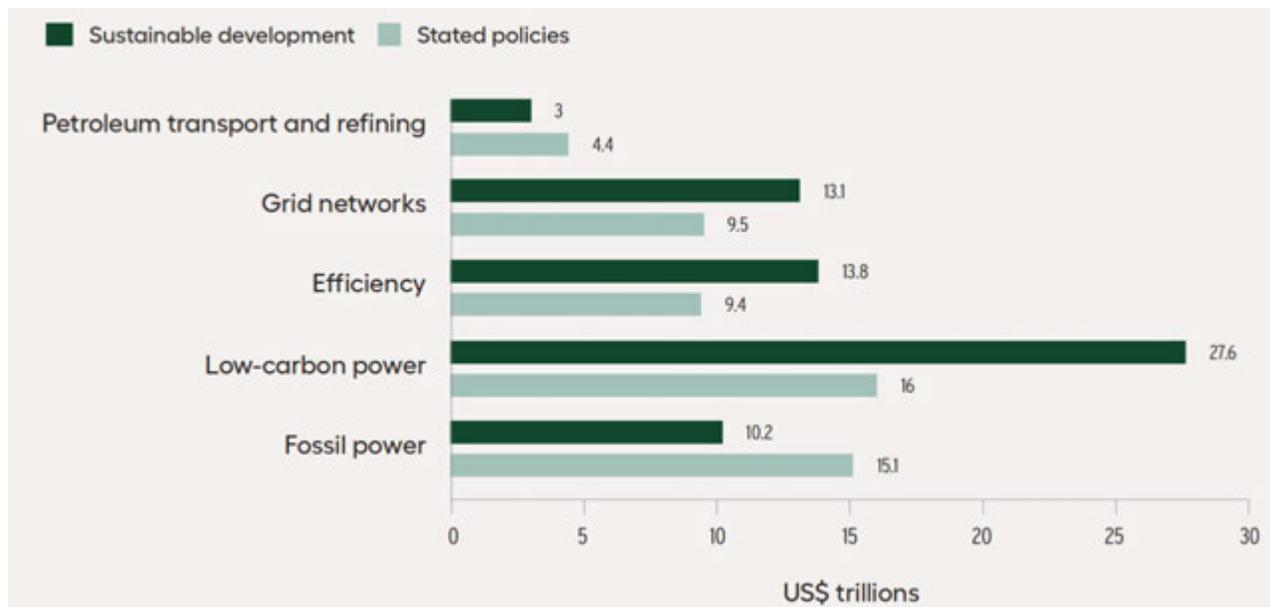
### Richer Countries With High HDIs Have Lower PP HDIs Because of Their Impacts on the Environment



## The World's Population of Almost 8 Billion is Growing By 1% a Year



## Sustainable Policies (Dark Green) Require More Government Subsidies



The report places more emphasis on reducing carbon emissions and material usage than on population growth. The HDR emphasizes that urbanization may slow population growth and reduce energy and materials usage, citing studies of insects that show larger termite mounds use less energy and materials per capita.

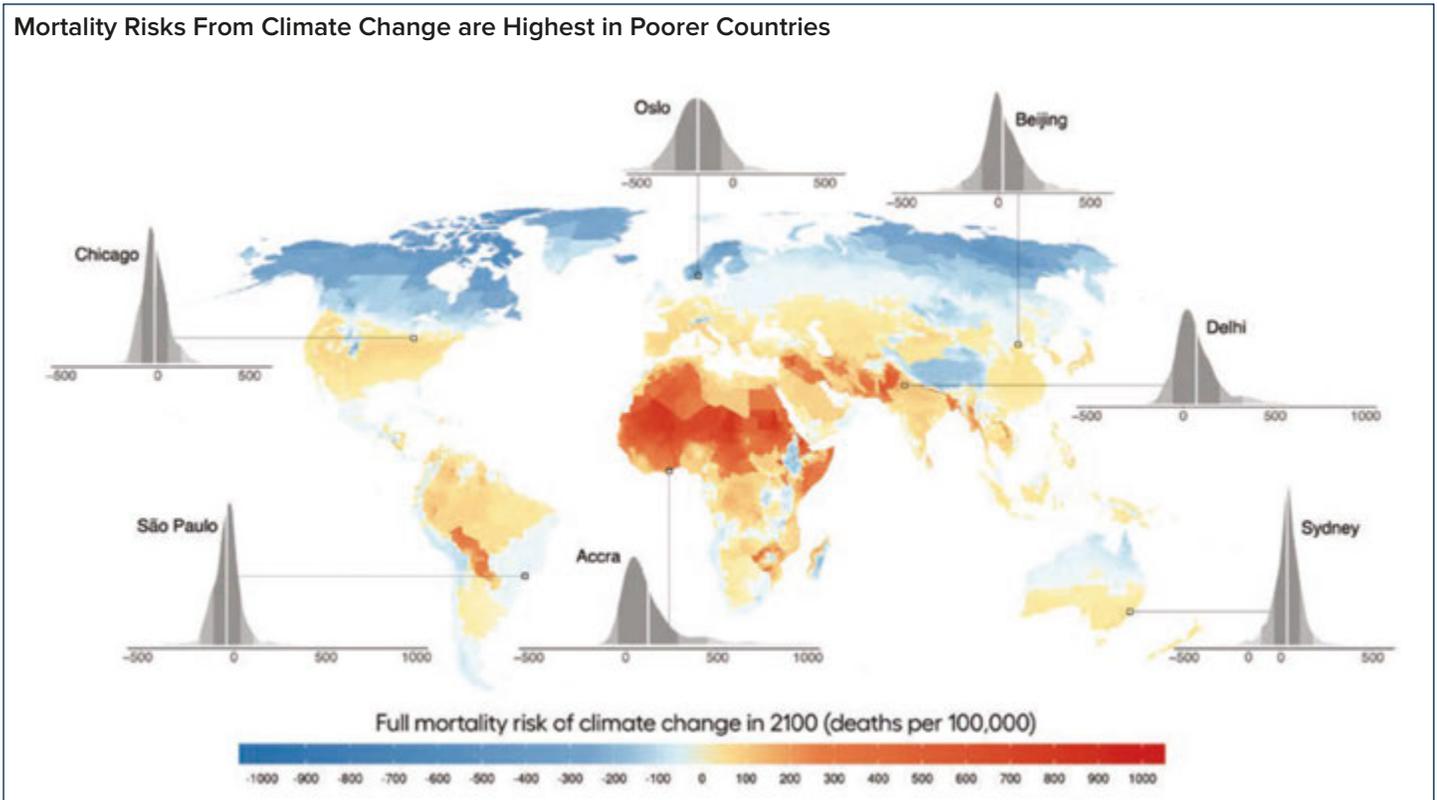
### Change

HDR 2020 cites polls that suggest most people understand that human activities are changing natural systems. Most respondents agree that individuals should change behavior to reduce negative human impacts on the environment. The report calls on governments to subsidize sustainable policies by promoting the development of low-carbon power emitters such as renewables.

The report emphasizes inequalities between rich and poor countries. Rich countries contribute most to the global warming that aggravates extreme weather and other conditions that disproportionately affect people in poorer countries. Mortality from climate change is projected to be larger in poorer countries in 2100.

The 2020 report adjusts the HDI for each country's planetary pressure. The Scandinavian countries that are

## Mortality Risks From Climate Change are Highest in Poorer Countries



at the top of the regular HDI are also at the top of the PP HDI, but countries such as Canada and the US fall in the shift from the HDI to the PP HDI, while middle-income countries such as Costa Rica rise on the PP HDI.

## Norway Ranks Highest on the HDI, But Ireland Ranks Highest on The PP HDI

HDI RANK	Human Development Index (HDI)	Planetary pressures-adjusted HDI (PHDI)			Adjustment factor for planetary pressures	Carbon dioxide emissions per capita (production)	Carbon dioxide emissions (production) index	Material footprint per capita	Material footprint index	
	Value	Value	Difference from HDI value (%)	Difference from HDI rank	Value	(tonnes)	Value	(tonnes)	Value	
	2019	2019	2019	2019*	2019	2018	2018	2017	2017	
<b>Very high human development</b>										
1	Norway	0.957	0.781	18.4	-15	0.816	8.3	0.881	37.9	0.752
2	Ireland	0.955	0.833	12.8	1	0.872	8.1	0.884	21.5	0.859
2	Switzerland	0.955	0.825	13.6	0	0.864	4.3	0.938	32.1	0.790
4	Hong Kong, China (SAR)	0.949	-	-	-	-	5.9	0.916	-	-
4	Iceland	0.949	0.768	19.1	-26	0.809	10.8	0.846	34.8	0.772
6	Germany	0.947	0.814	14.0	-1	0.859	9.1	0.869	23.0	0.849
7	Sweden	0.945	0.817	13.5	1	0.865	4.1	0.941	32.2	0.789
8	Australia	0.944	0.696	26.3	-72	0.737	16.9	0.758	43.4	0.716
8	Netherlands	0.944	0.794	15.9	-6	0.842	9.5	0.864	27.7	0.819
10	Denmark	0.940	0.824	12.3	5	0.876	6.1	0.913	24.6	0.839
11	Finland	0.938	0.770	17.9	-19	0.821	8.5	0.878	36.1	0.763
11	Singapore	0.938	0.656	30.1	-92	0.700	7.1	0.898	76.1	0.501
13	United Kingdom	0.932	0.825	11.5	10	0.885	5.6	0.919	22.7	0.851
14	Belgium	0.931	0.800	14.1	4	0.859	8.7	0.876	24.1	0.842
14	New Zealand	0.931	0.808	13.2	6	0.867	7.3	0.895	24.5	0.840
16	Canada	0.929	0.721	22.4	-40	0.776	15.3	0.781	34.9	0.771
17	United States	0.926	0.718	22.5	-45	0.775	16.6	0.763	32.5	0.787
18	Austria	0.922	0.771	16.4	-11	0.837	7.7	0.889	32.9	0.784
19	Israel	0.919	0.797	13.3	7	0.867	7.7	0.890	23.9	0.843
19	Japan	0.919	0.781	15.0	2	0.850	9.1	0.869	25.9	0.830
19	Liechtenstein	0.919	-	-	-	-	4.0	0.942	-	-
22	Slovenia	0.917	0.800	12.8	11	0.873	6.9	0.901	23.7	0.845
23	Korea (Republic of)	0.916	0.746	18.6	-19	0.814	12.9	0.816	28.6	0.813
23	Luxembourg	0.916	0.495	46.0	-131	0.541	15.9	0.773	105.6	0.308
25	Spain	0.904	0.795	12.1	11	0.880	5.7	0.918	24.1	0.842
26	France	0.901	0.801	11.1	16	0.889	5.2	0.926	22.5	0.853
27	Czechia	0.900	0.768	14.7	-5	0.853	9.9	0.858	23.0	0.849
28	Malta	0.895	0.794	11.3	13	0.887	3.6	0.948	26.5	0.826
29	Estonia	0.892	0.711	20.3	-40	0.797	14.8	0.798	29.6	0.806
29	Italy	0.892	0.792	11.2	12	0.888	5.6	0.920	21.9	0.857
31	United Arab Emirates	0.890	0.609	31.6	-87	0.685	21.3	0.694	49.6	0.675
32	Greece	0.888	0.768	13.5	0	0.865	7.0	0.899	25.8	0.831
33	Cyprus	0.887	0.757	13.5	-2	0.865	6.3	0.910	27.5	0.820
34	Lithuania	0.882	0.746	15.4	-8	0.846	4.8	0.931	36.3	0.762
35	Poland	0.880	0.752	14.5	-5	0.855	9.1	0.870	24.5	0.839
36	Andorra	0.868	-	-	-	-	6.1	0.912	-	-
37	Latvia	0.866	0.777	10.3	9	0.897	3.7	0.947	23.2	0.848
38	Portugal	0.864	0.780	9.7	15	0.903	5.0	0.929	18.7	0.878
39	Slovakia	0.860	0.720	16.3	-21	0.837	6.6	0.905	35.3	0.769
40	Hungary	0.854	0.781	8.5	21	0.915	5.1	0.926	14.9	0.903
40	Saudi Arabia	0.854	0.707	17.2	-33	0.827	18.4	0.736	12.4	0.919
42	Bahrain	0.852	0.691	18.9	-42	0.811	19.8	0.717	14.4	0.906
43	Chile	0.851	0.774	9.0	14	0.910	4.6	0.934	17.5	0.885
43	Croatia	0.851	0.779	8.5	19	0.916	4.5	0.936	16.0	0.895
45	Qatar	0.848	0.581	31.5	-84	0.685	38.0	0.456	13.2	0.913
46	Argentina	0.845	0.778	7.9	20	0.920	4.4	0.937	14.7	0.904
47	Brunei Darussalam	0.838	0.672	19.8	-49	0.802	18.5	0.735	20.0	0.869
48	Montenegro	0.829	0.738	11.0	-1	0.890	3.2	0.954	26.7	0.825
49	Romania	0.828	0.760	8.2	11	0.917	3.8	0.946	16.9	0.889
50	Palau	0.826	-	-	-	-	13.2	0.811	-	-
51	Kazakhstan	0.825	0.672	18.5	-46	0.815	17.6	0.749	18.1	0.881
52	Russian Federation	0.824	0.728	11.7	-4	0.883	11.7	0.832	9.9	0.935

### References

UNDP. 2020. The next frontier: Human development and the Anthropocene. <http://hdr.undp.org/en/2020-report>

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