GLOBALVIEWS

NO. 6
NOV 2016

How close to zero?

Assessing the world's extreme poverty-related trajectories for 2030

John W. McArthur
Senior Fellow, Global Economy and Development, The Brookings Institution

Krista Rasmussen
Research Analyst, Global Economy and Development, The Brookings Institution

B | Global Economy and Development
at BROOKINGS

Acknowledgments

The authors thank Margaret Biggs, Laurence Chandy, and Lorenz Noe for their very helpful comments on an earlier draft.

The Brookings Institution is a non-profit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars.

Brookings recognizes that the value it provides is in its absolute commitment to quality, independence and impact. Activities supported by its donors reflect this commitment and the analysis and recommendations are not determined or influenced by any donation. A full list of contributors to the Brookings Institution can be found in the Annual Report at https://www.brookings.edu/about-us/annual-report.

Cover Photo: iStock

BROOKINGS
1775 Massachusetts Ave., NW
Washington, DC 20036

Introduction

A core ambition of the Sustainable Development Goals (SDGs)—the economic, social, and environmental objectives affirmed by all U.N. member states in September 2015—is to end extreme poverty in all forms by 2030. Now that a year has passed since the establishment of the Goals, it is timely to assess how close each country stands to achieving the objective, defined as universal access to basic human needs. To that end, this policy brief presents current trajectories for 193 countries across a variety of key SDG targets. We focus on indicators with available data that were also previously addressed under the Millennium Development Goals (MDGs) from 2000 through 2015.

Overall, the analysis tackles three questions:

1) What is each country's current 2030 trajectory for each target?
2) What are each country's current prospects across targets?
3) For the most off-track countries and targets, is there a recent precedent for SDG success?

The results build on previous forward-looking assessments of individual targets (FAO, 2015; UNESCO, 2016; You et al., 2015; Alkema et al., 2016) and aggregate global trends (Nicolai et al., 2015). To our knowledge, this is the first systematic attempt to present country-level 2030 trajectories across several extreme poverty-relevant SDG targets. Importantly, it considers countries at all income levels, consistent with the SDGs' emphasis on the universal challenges of sustainable development.

Methods

We focus the analysis on six targets, and seven related indicators, with ample country-level, time-series data:

SDG 2.1	0% undernourishment
SDG 3.1	<70 maternal deaths per 100,000 live births
SDG 3.2	<25 deaths in children under-5 per 1,000 live births
	& <12 neonatal deaths (first 28 days of life) per 1,000 live births
SDG 4.1	100% primary school completion rate
SDG 6.1	100% access to safe drinking water
SDG 6.2	100% access to sanitation facilities

Data for SDG 3.2 are drawn from the U.N. Inter-agency Group for Child Mortality Estimation (2015) and all other data are drawn from the World Bank's online World Development Indicator database. Country income groups follow the World Bank's classifications as of July 2016.

These indicators represent only a subset of relevant SDG targets and clearly do not permit a comprehensive analysis of all issues relevant to the end of extreme poverty. However, even this subset provides

a surprisingly rich amount of information regarding trajectories linked to extreme poverty. Ideally we would have been able to include more indicators in the analysis, but country-level data gaps do not allow rigorous trend assessment on issues like extreme income poverty or malnutrition (see Serajuddin et al. 2015). Income poverty extrapolations also require assumptions about changes in within-country consumption distributions, which lie beyond the scope of our simple extrapolation methodology (World Bank Group, 2016).[1]

To assess 2030 trajectories, we first calculate each country's average annual rate of progress between 2005 and 2015. We then extrapolate the same trend out to 2030. For maternal mortality, child mortality, and neonatal mortality, we use proportional rate of progress calculations (Equation 1) to account for the ladder of technology countries must climb as mortality rates approach zero. For the other indicators we use percentage point (absolute) rate of change calculations (Equation 2), on the premise that these indicators rely more on expanding access to a relatively consistent technology set, such as water wells, toilets, or staple foods. The distinction aligns with previous literature examining rates of progress during the MDG period (e.g., Kenny and Sumner, 2011; Fukuda-Parr et al., 2013; You et al. 2015).

$$\textit{Proportional rate} = 1 - \left(\frac{N_{2015}}{N_{2005}}\right)^{\frac{1}{10}} \quad (1)$$

$$\textit{Percentage point rate} = \frac{N_{2015} - N_{2005}}{10} \quad (2)$$

For access to water, access to sanitation, and primary school completion rate, minor adjustments are needed to calculate the annualized rate of progress when countries are missing indicator values between 2005 and 2015. If a value is missing for 2005 then we set 2004 as the initial year for rate calculations. If a value is missing for 2015 then the most recent available year from 2010 onward is set as the end point. For undernourishment, the World Bank reports all values below five percent as "<5." In those cases, since we are not able to calculate annual rates of progress, we make a simplifying assumption that countries are on track to eliminate hunger by 2030 (indicated by " ~0 " in Table 2 below).

To tabulate how countries are performing across targets, we consider maternal mortality, under-5 mortality, neonatal mortality, access to water, and access to sanitation. We do not include undernourishment and primary completion rates in those tabulations because of data gaps. For maternal mortality, we apply the SDG 3.1 benchmark of 70 deaths per 100,000 live births at the country level, even though the formal target is defined at the global level. For target 3.2, we only count countries as being on track if they are on course to reach both the under-5 mortality target and the neonatal mortality target, since the latter is a subset of the former.

[1] Readers interested in more detailed considerations of policy issues linked to the "last mile" of extreme poverty might wish to read the volume edited by Chandy et al (2015), including McArthur (2015).

Results

What is each country's current 2030 trajectory for each target?

Table 1 shows the number of countries whose current trajectories place them on track to meet each target by 2030. This summarizes the data presented in Table 2, which lists, for each indicator, every country's most recent available data point and current trajectory for 2030. Values at or better than the SDG target are colored green. Values are colored red if a country has shown recent evidence of moving backwards, away from the target. For primary completion rates, some of these backward-trending data might be a result of either short-term negative shocks or challenges of measurement, so in those cases we make an approximating assumption that the 2030 trajectory value is the same as the value for 2015 (or most recent year).

The table indicates that health-related indicators have the largest number of countries on track to reach the 2030 targets: 143 countries are currently on course for child mortality and 130 countries are on course for neonatal mortality. However, 63 countries are not on track to meet both SDG 3.2 benchmarks. Nineteen countries are on course to reach an under-5 mortality rate between 50 and 106 deaths per 1,000 live births, at least twice the target level of 25 deaths per 1,000 births. Somewhat fewer countries, only 111, are on track to achieve a maternal mortality ratio of 70 or lower. Sanitation is the issue with the greatest overall shortcomings, including only 36 countries that are on a path to universal access by 2030. This compares to 89 countries, less than half of U.N. member states, that are on course for universal access to drinking water.

Trajectories for undernourishment and primary completion rates are more ambiguous, but also not nearly positive enough for universal achievement of the relevant SDGs. Twenty-five countries are explicitly on track to end undernourishment by 2030 and another 36 countries are assumed to be on track, for a total of 61 countries listed in the corresponding "Yes" row in Table 1. Meanwhile 79 countries are on course to achieve universal primary completion. But fully 78 countries do not have adequate data to assess undernourishment and 57 lack data for primary completion. Many of the data gaps are in developing countries, where missing values are probably highly correlated with being off track. For the high-income countries that do not report, in the best case this could be because an issue is already deemed to be solved. In the worst case it could be that poverty-related problems of marginalized groups simply receive inadequate attention.

Table 1: Number of countries currently on track, by SDG target

Meet target by 2030	2.2 Under-nourishment	3.1 Maternal mortality	3.2a Under-5 mortality	3.2b Neonatal mortality	4.1 Primary completion rate	6.1 Access to water	6.2 Access to sanitation
Yes	**61**	**111**	**143**	**130**	**79**	**89**	**36**
No	**54**	**70**	**49**	**62**	**57**	**96**	**147**
No data, developing countries	31	4	0	0	37	4	4
No data, high-income countries	47	8	1	1	20	4	6
Total	193	193	193	193	193	193	193

What are each countries' current prospects across targets?

The map in Figure 1 indicates how many of four key SDG targets each country is on track to meet by 2030: maternal mortality; under-5 and neonatal mortality; access to water; and access to sanitation. As mentioned above, we do not include undernourishment or primary school completion here due to data gaps, and we only count countries as meeting target 3.2 if they achieve 2030 thresholds for both under-5 and neonatal mortality.

Figure 1: How many of four key SDG targets are countries on track to meet by 2030?

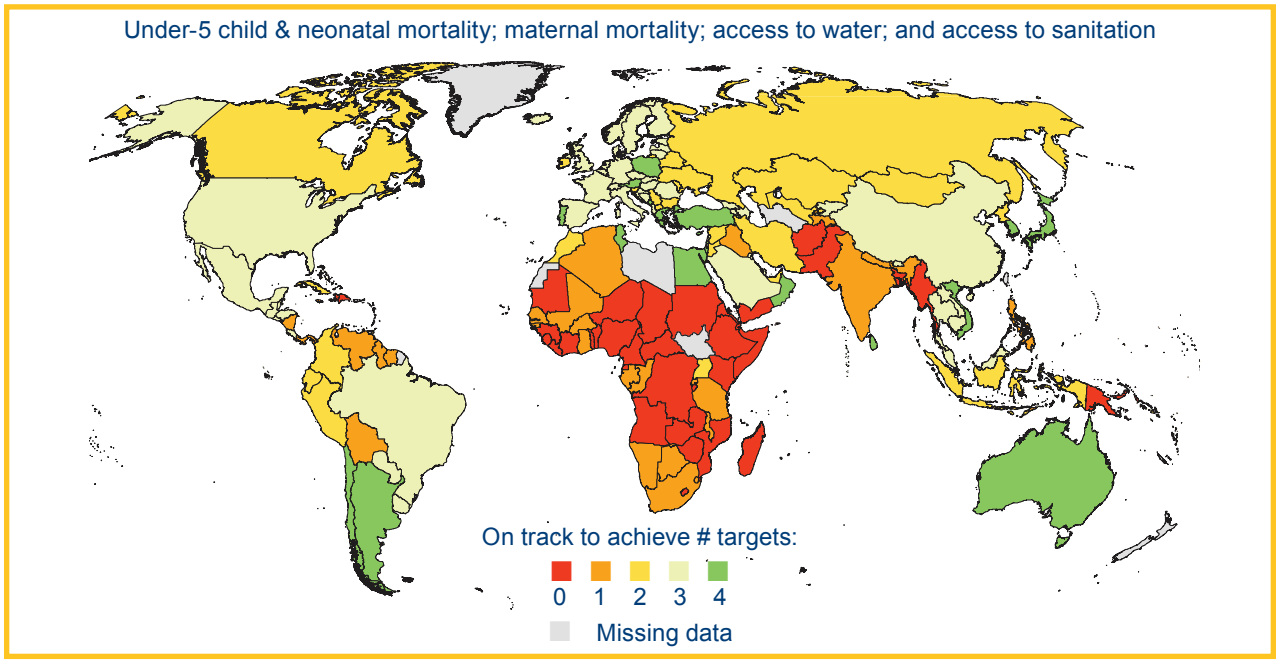


Table 2: Country-level 2030 trajectories

Green values = country meets target
Red values = country is regressing

		2.2 Undernourishment* (%)		3.1 Maternal Mortality (deaths per 100,000 live births)		3.2a Under-5 mortality (deaths per 1,000 live births)		3.2b Neonatal mortality (deaths per 1,000 live births)		4.1 Primary Completion Rate** (%)		6.1 Access to Water (%)		6.2 Access to Sanitation (%)	
	Income Group†	2015	2030	2015	2030	2015	2030	2015	2030	Last year (~2015)	2030	Last year (~2015)	2030	Last year (~2015)	2030
East Asia and Pacific															
Australia	H	..	..	6	5	4	2	2	1	..	..	100.0	100.0	100.0	100.0
Brunei	H	<5	~0	23	15	10	12	4	4	100.0	100.0	..	..	..	..
Japan	H	..	..	5	3	3	2	1	0	100.0	100.0	100.0	100.0	100.0	100.0
Korea Rep	H	<5	~0	11	8	3	2	2	1	100.0	100.0	97.6	100.0	100.0	100.0
Nauru	H	..	..	..	..	35	31	23	20	..	..	..	..	..	..
New Zealand	H	..	..	11	8	6	5	3	3	..	..	100.0	100.0	..	..
Singapore	H	..	..	10	5	3	2	1	1	..	..	100.0	100.0	100.0	100.0
Cambodia	M	14.2	4.3	161	59	29	8	15	6	96.3	100.0	75.5	100.0	42.4	68.7
China	M	9.3	0.0	27	11	11	3	6	1	..	..	95.5	100.0	76.5	93.9
Federated States of Micronesia	M	..	..	100	64	35	22	19	13	..	..	89.0	88.0	57.1	77.6
Fiji	M	<5	~0	30	20	22	21	10	6	100.0	100.0	95.7	99.9	91.1	100.0
Indonesia	M	7.6	0.0	126	58	27	14	14	8	100.0	100.0	87.4	96.5	60.8	73.8
Kiribati	M	<5	~0	90	49	56	45	24	20	100.0	100.0	66.9	74.0	39.7	44.5
Lao PDR	M	18.5	2.0	197	64	67	38	30	21	100.0	100.0	75.7	100.0	70.9	100.0
Malaysia	M	<5	~0	40	27	7	6	4	3	100.0	100.0	98.2	100.0	96.0	99.9
Marshall Islands	M	..	..	..	..	36	31	17	15	99.8	**99.8	94.6	95.9	76.9	83.2
Mongolia	M	20.5	0.0	44	14	22	8	11	5	100.0	100.0	64.4	70.7	59.7	70.2
Myanmar	M	14.2	0.0	178	108	50	30	26	18	85.1	92.0	80.6	93.0	79.6	94.9
Palau	M	..	..	..	..	16	10	9	5	95.5	88.3	95.3	98.5	100.0	100.0
Papua New Guinea	M	..	..	215	147	57	39	25	19	78.6	..	40.0	44.4	18.9	18.6
Philippines	M	13.5	7.3	114	97	28	19	13	9	100.0	100.0	91.8	96.6	73.9	84.1
Samoa	M	<5	~0	51	27	18	15	10	8	100.0	100.0	99.0	100.0	91.5	90.8
Solomon Islands	M	11.3	9.7	114	66	28	22	12	10	87.3	..	80.8	82.0	29.8	34.3
Thailand	M	7.4	0.0	20	13	12	7	7	4	..	..	97.8	100.0	93.0	92.7
Timor Leste	M	26.9	16.5	215	60	53	26	22	14	98.4	..	71.9	88.4	40.6	44.8
Tonga	M	..	..	124	141	17	17	7	7	100.0	100.0	99.6	100.0	91.0	89.1
Tuvalu	M	..	..	..	..	27	17	18	11	93.2	**93.2	97.7	100.0	83.3	88.0
Vanuatu	M	6.4	4.9	78	43	28	27	12	11	93.8	99.3	94.5	100.0	57.9	71.1
Vietnam	M	11.0	0.0	54	45	22	14	11	10	100.0	100.0	97.6	100.0	78.0	100.0
Korea DPR	L	41.6	52.7	82	57	25	17	14	9	..	..	99.7	99.5	81.9	99.2
Europe and Central Asia															
Andorra	H	..	..	..	..	3	2	1	1	..	..	100.0	100.0	100.0	100.0
Austria	H	..	..	4	3	4	2	2	1	99.2	100.0	100.0	100.0	100.0	100.0
Belgium	H	..	..	7	6	4	3	2	2	89.5	..	100.0	100.0	99.5	99.5
Croatia	H	..	..	8	5	4	2	3	1	92.3	**92.3	99.6	100.0	97.0	96.7
Cyprus	H	..	..	7	3	3	1	2	1	99.8	**99.8	100.0	100.0	100.0	100.0
Czech Republic	H	..	..	4	2	3	2	2	1	100.0	100.0	100.0	100.0	99.1	99.1
Denmark	H	..	..	6	4	4	2	3	2	99.4	**99.4	100.0	100.0	99.6	99.6
Estonia	H	..	..	9	4	3	1	2	0	100.0	100.0	99.6	100.0	97.2	97.3
Finland	H	..	..	3	2	2	1	1	1	99.4	**99.4	100.0	100.0	97.6	97.7
France	H	..	..	8	6	4	4	2	2	..	..	100.0	100.0	98.7	98.7
Germany	H	..	..	6	5	4	3	2	2	100.0	100.0	100.0	100.0	99.2	99.2
Greece	H	..	..	3	3	5	4	3	2	97.1	98.9	100.0	100.0	99.0	100.0
Hungary	H	..	..	17	23	6	4	4	2	98.5	100.0	100.0	100.0	98.0	98.0
Iceland	H	..	..	3	2	2	1	1	0	97.3	**97.3	100.0	100.0	98.8	98.8
Ireland	H	..	..	8	8	4	2	2	2	..	..	97.9	99.4	90.5	91.7
Italy	H	..	..	4	4	4	2	2	1	100.0	100.0	100.0	100.0	99.5	99.5
Latvia	H	..	..	18	13	8	4	5	3	100.0	100.0	99.3	100.0	87.8	94.3

Green values = country meets target
Red values = country is regressing

	Income Group†	2.2 Undernourishment* (%) 2015	2.2 Undernourishment* (%) 2030	3.1 Maternal Mortality (deaths per 100,000 live births) 2015	3.1 Maternal Mortality (deaths per 100,000 live births) 2030	3.2a Under-5 mortality (deaths per 1,000 live births) 2015	3.2a Under-5 mortality (deaths per 1,000 live births) 2030	3.2b Neonatal mortality (deaths per 1,000 live births) 2015	3.2b Neonatal mortality (deaths per 1,000 live births) 2030	4.1 Primary Completion Rate** (%) Last year (~2015)	4.1 Primary Completion Rate** (%) 2030	6.1 Access to Water (%) Last year (~2015)	6.1 Access to Water (%) 2030	6.2 Access to Sanitation (%) Last year (~2015)	6.2 Access to Sanitation (%) 2030
Liechtenstein	H	..	..	..	..	..	..	..	..	100.0	100.0	..	..	..	..
Lithuania	H	..	..	10	8	5	2	3	1	97.2	100.0	96.6	100.0	92.4	98.3
Luxembourg	H	..	..	10	7	2	1	1	0	82.0	..	100.0	100.0	97.6	97.5
Monaco	H	..	..	..	..	4	2	2	1	..	..	100.0	100.0	100.0	100.0
Netherlands	H	..	..	7	4	4	2	2	1	..	..	100.0	100.0	97.7	97.4
Norway	H	..	..	5	3	3	1	2	1	100.0	100.0	100.0	100.0	98.1	98.1
Poland	H	..	..	3	1	5	3	3	2	98.1	100.0	98.3	100.0	97.2	100.0
Portugal	H	..	..	10	8	4	2	2	2	..	..	100.0	100.0	99.7	100.0
San Marino	H	..	..	..	..	3	2	1	0	95.3	..	..	..	..	..
Slovakia	H	..	..	6	5	7	5	4	3	95.9	100.0	100.0	100.0	98.8	98.7
Slovenia	H	..	..	9	7	3	1	1	1	98.3	95.0	99.5	99.4	99.1	99.1
Spain	H	..	..	5	5	4	3	3	2	99.6	98.8	100.0	100.0	99.9	99.9
Sweden	H	..	..	4	3	3	2	2	1	100.0	100.0	100.0	100.0	99.3	99.3
Switzerland	H	..	..	5	3	4	3	3	2	97.2	98.3	100.0	100.0	99.9	99.9
United Kingdom	H	..	..	9	6	4	2	2	1	..	..	100.0	100.0	99.2	99.2
Albania	M	..	..	29	28	14	8	6	3	100.0	100.0	95.1	93.8	93.2	100.0
Armenia	M	5.8	0.0	25	12	14	7	7	3	..	..	100.0	100.0	89.5	89.6
Azerbaijan	M	<5	~0	25	16	32	15	18	10	98.1	100.0	87.0	99.7	89.3	100.0
Belarus	M	..	..	4	1	5	2	2	1	97.6	97.7	99.7	100.0	94.3	93.9
Bosnia & Herzegovina	M	..	..	11	8	5	3	4	3	..	..	99.9	100.0	94.8	94.7
Bulgaria	M	..	..	11	7	10	6	6	3	98.7	**98.7	99.4	99.1	86.0	86.1
Georgia	M	7.4	9.0	36	35	12	4	7	2	100.0	100.0	100.0	100.0	86.3	77.0
Kazakhstan	M	<5	~0	12	2	14	4	7	2	100.0	100.0	92.9	92.0	97.5	98.1
Kyrgyzstan	M	6.0	0.0	76	64	21	8	12	5	100.0	100.0	90.0	100.0	93.3	94.8
Macedonia	M	..	..	8	6	6	1	4	1	..	..	99.4	99.5	90.9	92.3
Moldova	M	..	..	23	10	16	11	12	10	93.0	**93.0	88.4	91.7	76.4	80.1
Montenegro	M	..	..	7	5	5	1	3	1	92.6	..	99.7	100.0	95.9	100.0
Romania	M	..	..	31	28	11	4	6	2	94.3	**94.3	100.0	100.0	79.1	84.4
Russian Federation	M	..	..	25	11	10	4	5	2	100.0	..	96.9	98.9	72.2	71.9
Serbia	M	..	..	17	21	7	4	4	3	100.0	..	99.2	99.0	96.4	96.0
Tajikistan	M	33.2	19.6	32	19	45	26	21	15	99.6	**99.6	73.8	87.6	95.0	99.3
Turkey	M	<5	~0	16	2	14	5	7	2	99.8	**99.8	100.0	100.0	94.9	100.0
Turkmenistan	M	<5	~0	42	30	51	32	23	16	..	..	..	..	..	..
Ukraine	M	..	..	24	17	9	4	6	3	100.0	100.0	96.2	94.7	95.9	97.1
Uzbekistan	M	<5	~0	36	29	39	24	20	14	95.7	**95.7	87.3	86.0	100.0	100.0
Latin America and Caribbean															
Antigua & Barbuda	H	..	..	..	..	8	4	5	3	100.0	..	97.9	98.0	91.4	97.4
Bahamas	H	..	..	80	90	12	9	7	5	93.1	**93.1	98.4	100.0	92.0	95.0
Barbados	H	<5	~0	27	15	13	9	8	6	95.5	100.0	99.7	100.0	96.2	100.0
Chile	H	<5	~0	22	16	8	7	5	4	96.6	..	99.0	100.0	99.1	100.0
Saint Kitts & Nevis	H	..	..	..	..	11	6	7	4	82.1	**82.1	98.3	98.3	..	..
Trinidad & Tobago	H	7.4	0.5	63	65	20	13	13	9	94.9	100.0	95.1	96.6	91.5	92.1
Uruguay	H	<5	~0	15	7	10	6	5	3	100.0	100.0	99.7	100.0	96.4	99.2
Argentina	M	<5	~0	52	44	13	8	6	4	100.0	100.0	99.1	100.0	96.4	100.0
Belize	M	6.2	8.0	28	11	17	11	8	5	100.0	100.0	99.5	100.0	90.5	97.2
Bolivia	M	15.9	0.0	206	114	38	19	20	12	96.0	..	90.0	100.0	50.3	62.5
Brazil	M	<5	~0	44	23	16	11	9	6	..	..	98.1	100.0	82.8	90.5
Colombia	M	8.8	7.7	64	46	16	10	9	5	..	..	91.4	92.8	81.1	87.1
Costa Rica	M	<5	~0	25	18	10	9	6	5	98.7	100.0	97.8	100.0	94.5	97.0
Cuba	M	<5	~0	39	36	6	4	2	1	97.7	100.0	94.9	99.1	93.2	99.2
Dominica	M	..	..	..	..	21	34	16	25	100.0	100.0	..	..	..	..
Dominican Republic	M	12.3	0.0	92	159	31	24	22	19	90.9	98.3	84.7	82.0	84.0	90.1

Green values = country meets target
Red values = country is regressing

		2.2 Undernourishment* (%)		3.1 Maternal Mortality (deaths per 100,000 live births)		3.2a Under-5 mortality (deaths per 1,000 live births)		3.2b Neonatal mortality (deaths per 1,000 live births)		4.1 Primary Completion Rate** (%)		6.1 Access to Water (%)		6.2 Access to Sanitation (%)	
	Income Group†	2015	2030	2015	2030	2015	2030	2015	2030	Last year (~2015)	2030	Last year (~2015)	2030	Last year (~2015)	2030
Ecuador	M	10.9	0.0	64	51	22	14	11	7	100.0	100.0	86.9	93.8	84.7	98.8
El Salvador	M	12.4	15.7	54	38	17	9	8	5	100.0	100.0	93.8	100.0	75.0	87.3
Grenada	M	..	..	27	30	12	9	6	4	94.5	**94.5	96.6	96.6	98.0	98.0
Guatemala	M	15.6	14.7	88	55	29	17	13	9	86.6	100.0	92.8	100.0	63.9	72.6
Guyana	M	10.6	11.3	229	225	39	35	23	21	84.1	**84.1	98.3	100.0	83.7	87.4
Honduras	M	12.2	5.4	129	103	20	11	11	6	90.7	100.0	91.2	100.0	82.6	100.0
Jamaica	M	8.1	10.0	89	85	16	11	12	8	..	..	93.8	94.1	81.8	82.9
Mexico	M	<5	~0	38	22	13	7	7	6	100.0	100.0	96.1	100.0	85.2	95.1
Nicaragua	M	16.6	5.1	150	105	22	13	10	6	85.4	100.0	87.0	94.7	67.9	80.4
Panama	M	9.5	0.0	94	106	17	11	10	6	100.0	100.0	94.7	99.6	75.0	83.1
Paraguay	M	10.4	9.9	132	100	21	13	11	6	89.1	**89.1	98.0	100.0	88.6	100.0
Peru	M	7.5	0.0	68	31	17	8	8	4	95.9	**95.9	86.7	93.3	76.2	89.1
Saint Lucia	M	..	..	48	29	14	11	9	7	..	..	96.3	98.4	90.5	97.7
St Vincent & the Grenadines	M	6.2	0.5	45	38	18	14	12	9	100.0	100.0	95.1	95.1	..	..
Suriname	M	8.0	1.7	155	90	21	13	12	7	93.7	100.0	94.8	99.5	79.2	77.5
Venezuela	M	<5	~0	95	98	15	11	9	8	96.2	100.0	93.1	94.9	94.4	100.0
Haiti	L	53.4	47.1	359	248	69	46	25	20	100.0	..	57.7	53.4	27.6	33.4
Middle East and North Africa															
Bahrain	H	..	..	15	10	6	3	1	0	..	..	100.0	100.0	99.2	99.2
Israel	H	..	..	5	3	4	2	2	1	100.0	100.0	100.0	100.0	100.0	100.0
Kuwait	H	<5	~0	4	2	9	5	3	1	100.0	100.0	99.0	99.0	100.0	100.0
Malta	H	..	..	9	5	6	6	4	4	91.8	**91.8	100.0	100.0	100.0	100.0
Oman	H	<5	~0	17	13	12	10	5	4	100.0	..	93.4	100.0	96.7	100.0
Qatar	H	..	..	13	6	8	5	4	2	94.1	**94.1	100.0	100.0	98.0	96.8
Saudi Arabia	H	<5	~0	12	7	15	9	8	5	100.0	100.0	97.0	97.5	100.0	100.0
United Arab Emirates	H	<5	~0	6	6	7	4	4	2	100.0	100.0	99.6	99.5	97.6	97.7
Algeria	M	<5	~0	140	129	26	17	16	11	100.0	100.0	83.6	77.4	87.6	91.0
Djibouti	M	15.9	0.0	229	126	65	41	33	24	63.7	100.0	90.0	96.4	47.4	37.6
Egypt	M	<5	~0	33	17	24	13	13	7	100.0	100.0	99.4	100.0	94.7	100.0
Iran	M	<5	~0	25	16	16	7	10	5	100.0	100.0	96.2	97.8	90.0	99.3
Iraq	M	22.8	19.3	50	45	32	22	18	14	..	..	86.6	92.3	85.6	95.0
Jordan	M	<5	~0	58	52	18	11	11	7	86.0	**86.0	96.9	97.0	98.6	99.2
Lebanon	M	<5	~0	15	6	8	4	5	2	78.1	67.9	99.0	100.0	80.7	78.7
Libya	M	..	..	9	7	13	6	7	3	..	..	..	..	96.6	96.7
Morocco	M	<5	~0	121	61	28	16	18	11	100.0	100.0	85.4	92.3	76.7	88.4
Syria	M	..	..	68	86	13	7	7	4	68.9	**68.9	90.1	92.2	95.7	100.0
Tunisia	M	<5	~0	62	48	14	7	8	4	96.9	**96.9	97.7	100.0	91.6	100.0
Yemen	M	26.1	19.4	385	328	42	18	22	13	69.2	91.1	54.9	50.8	53.3	68.7
North America															
Canada	H	..	..	7	5	5	4	3	2	..	..	99.8	99.8	99.8	99.8
United States of America	H	..	..	14	16	7	5	4	3	..	..	99.2	99.5	100.0	100.0
South Asia															
Bangladesh	M	16.4	15.3	176	72	38	16	23	12	73.5	100.0	86.9	97.5	60.6	75.4
Bhutan	M	..	..	148	49	33	14	18	10	97.0	100.0	100.0	100.0	50.4	67.5
India	M	15.2	6.2	174	85	48	24	28	17	96.2	..	94.1	100.0	39.6	53.1
Maldives	M	5.2	0.0	68	38	9	2	5	1	..	..	98.6	100.0	97.9	100.0
Pakistan	M	22.0	18.0	178	108	81	58	46	36	73.7	90.1	91.4	94.3	63.5	89.9
Sri Lanka	M	22.0	10.8	30	17	10	6	5	3	98.0	**98.0	95.6	100.0	95.1	100.0
Afghanistan	L	26.8	14.2	396	133	91	61	36	28	..	..	55.3	79.6	31.9	40.3
Nepal	L	7.8	0.0	258	114	36	16	22	13	100.0	100.0	91.6	100.0	45.8	69.7

Green values = country meets target
Red values = country is regressing

		2.2 Undernourishment* (%)		3.1 Maternal Mortality (deaths per 100,000 live births)		3.2a Under-5 mortality (deaths per 1,000 live births)		3.2b Neonatal mortality (deaths per 1,000 live births)		4.1 Primary Completion Rate** (%)		6.1 Access to Water (%)		6.2 Access to Sanitation (%)	
	Income Group†	2015	2030	2015	2030	2015	2030	2015	2030	Last year (~2015)	2030	Last year (~2015)	2030	Last year (~2015)	2030
Sub-Saharan Africa															
Seychelles	H	..	..	..	..	14	13	9	8	100.0	100.0	95.7	95.7	98.4	98.4
Angola	M	14.2	0.0	477	265	157	106	49	39	49.7	..	49.0	53.5	51.6	70.5
Botswana	M	24.1	11.1	129	41	44	22	22	17	99.7	100.0	96.2	97.5	63.4	74.1
Cameroon	M	9.9	0.0	596	441	88	52	26	20	72.2	96.2	75.6	88.6	45.8	49.4
Cape Verde	M	9.4	0.0	42	29	25	20	12	10	99.8	100.0	91.7	100.0	72.2	99.5
Congo	M	30.5	30.9	442	282	45	15	18	9	74.3	78.8	76.5	83.7	15.0	17.4
Cote d Ivoire	M	13.3	11.1	645	523	93	56	38	28	56.9	..	81.9	86.0	22.5	27.4
Equatorial Guinea	M	..	..	342	204	94	57	33	24	51.2	66.3	47.9	48.8	74.5	69.3
Gabon	M	<5	~0	291	203	51	27	23	17	..	..	93.2	100.0	41.9	45.1
Ghana	M	<5	~0	319	249	62	37	28	22	100.0	100.0	88.7	100.0	14.9	19.2
Kenya	M	21.2	5.3	510	299	49	22	22	15	100.0	100.0	63.2	74.0	30.1	33.2
Lesotho	M	11.2	11.5	487	257	90	56	33	29	75.7	96.2	81.8	84.6	30.3	36.5
Mauritania	M	5.6	0.0	602	433	85	57	36	28	67.5	100.0	57.9	72.3	40.0	55.8
Mauritius	M	<5	~0	53	84	14	11	8	7	97.5	**97.5	99.9	100.0	93.1	94.7
Namibia	M	42.3	67.6	265	148	45	23	16	14	86.5	89.1	91.0	100.0	34.4	41.3
Nigeria	M	7.0	6.7	814	650	109	62	34	25	76.0	**76.0	68.5	84.5	29.0	24.2
Sao Tome & Principe	M	6.6	1.5	156	125	47	26	17	12	92.4	100.0	97.1	100.0	34.7	46.4
South Africa	M	<5	~0	138	189	41	16	11	8	..	..	93.2	99.6	66.4	75.4
Sudan	M	..	..	311	185	70	47	30	25	56.2	..	55.5	50.2	23.6	22.9
Swaziland	M	26.8	43.3	389	206	61	19	14	10	79.0	100.0	74.1	93.6	57.5	62.6
Zambia	M	47.8	45.4	224	105	64	28	21	14	81.0	84.4	65.4	77.6	43.9	47.2
Benin	L	7.5	0.0	405	293	100	70	32	27	76.3	100.0	77.9	89.3	19.7	27.5
Burkina Faso	L	20.7	12.9	371	262	89	37	27	17	60.5	100.0	82.3	100.0	19.7	27.7
Burundi	L	..	..	712	534	82	42	29	20	66.6	100.0	75.9	79.8	48.0	51.6
Central African Republic	L	47.7	56.6	882	669	130	90	43	36	44.4	90.7	68.5	74.0	21.8	26.2
Chad	L	34.4	26.4	856	536	139	96	39	32	38.1	54.8	50.8	56.2	12.1	14.2
Comoros	L	..	..	335	226	74	48	34	26	73.6	96.4	90.1	90.1	35.8	46.1
Congo DR	L	..	..	693	573	98	59	30	23	66.8	..	52.4	57.5	28.7	34.5
Eritrea	L	..	..	501	365	47	25	18	13	36.8	**36.8	57.8	64.0	15.7	19.8
Ethiopia	L	32.0	11.2	353	116	59	24	28	15	53.7	72.0	57.3	85.8	28.0	47.2
Gambia The	L	5.3	0.0	706	578	69	41	30	21	67.3	**67.3	90.2	96.6	58.9	58.4
Guinea	L	16.4	6.3	679	502	94	53	31	21	49.5	**49.5	76.8	90.3	20.1	27.3
Guinea-Bissau	L	20.7	13.7	549	370	93	47	40	27	62.2	..	79.3	100.0	20.8	28.6
Liberia	L	31.9	20.2	725	434	70	29	24	14	58.8	..	75.6	88.8	16.9	20.8
Madagascar	L	33.0	26.4	353	204	50	24	20	13	68.8	88.4	51.5	65.6	12.0	13.8
Malawi	L	20.7	10.2	634	614	64	26	22	15	79.3	100.0	90.2	100.0	41.0	47.7
Mali	L	<5	~0	587	438	115	63	38	27	53.1	73.1	77.0	100.0	24.7	31.5
Mozambique	L	25.3	7.3	489	251	79	35	27	18	47.6	60.6	51.1	60.5	20.5	26.5
Niger	L	9.5	0.7	553	370	96	39	27	17	58.6	100.0	58.2	72.5	10.9	15.4
Rwanda	L	31.6	8.9	290	106	42	10	19	9	66.6	100.0	76.1	85.5	61.6	75.7
Senegal	L	10.0	0.0	315	200	47	16	21	11	59.0	72.6	78.5	89.6	47.6	55.1
Sierra Leone	L	22.3	0.0	1,360	768	120	55	35	23	69.5	..	62.6	78.0	13.3	15.4
Somalia	L	..	..	732	504	137	95	40	33	..	..	31.7	42.1	23.5	27.0
South Sudan	L	..	..	789	486	93	50	39	27	36.7	..	58.7	..	6.7	..
Tanzania	L	32.1	25.2	398	175	49	19	19	11	73.7	100.0	55.6	56.9	15.6	22.5
Togo	L	11.4	0.0	368	294	78	51	27	20	85.1	100.0	63.1	72.7	11.6	11.9
Uganda	L	25.5	30.9	343	193	55	20	19	11	55.6	**55.6	79.0	100.0	19.1	22.6
Zimbabwe	L	33.4	21.1	443	262	71	41	24	24	89.2	..	76.9	74.0	36.8	34.1

† *Income Groups: H = high-income, M = middle-income, L = low-income*
* *The World Bank reports all undernourishment values below 5% as "<5". The table assumes countries with this reported value in 2015 reach the SDG target by 2030, as indicated by "~0".*
** *For countries registering recent backward movement on primary completion rate, 2030 values are assumed to be the same as 2015 values.*

Of the 175 countries with adequate data, only 22 are currently on track to meet all four targets. At the other end of the spectrum, the greatest global concern should be the 37 countries that are currently on a path to meet none of the goals. These countries are listed in Box 1. They are roughly evenly split between low-income countries and middle-income countries; the majority (28 countries) are located in sub-Saharan Africa. Not only are these countries off track, they are also some of the furthest in absolute distance from reaching the targets. Meanwhile, another 31 countries are on track for only one of the four targets; 15 of these are also located in sub-Saharan Africa.

Box 1: 37 top priority countries

The following 37 countries are currently not on track to achieve any of the SDG target thresholds for maternal mortality, child mortality, access to water and access to sanitation:

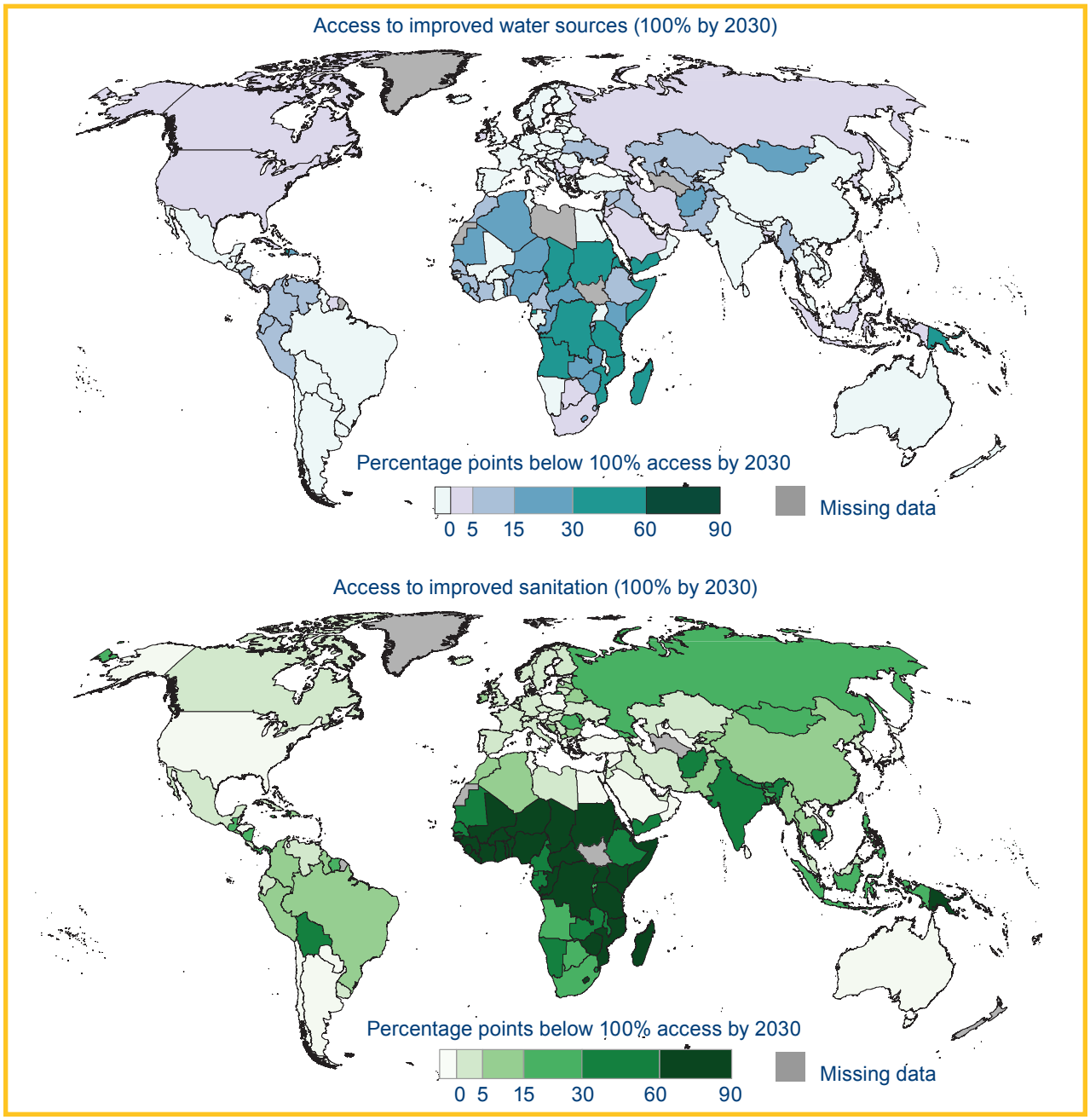
Afghanistan	Comoros	The Gambia	Mozambique	Sudan
Angola	Congo, DR	Guinea	Myanmar	Togo
Bangladesh	Cote d'Ivoire	Haiti	Niger	Yemen
Benin	Djibouti	Kenya	Nigeria	Zambia
Burundi	Dominican Republic	Lesotho	Pakistan	Zimbabwe
Cameroon	Equatorial Guinea	Liberia	Papua New Guinea	
Central African Republic	Eritrea	Madagascar	Sierra Leone	
Chad	Ethiopia	Mauritania	Somalia	

Remarkably, 27 high-income countries are off track for one target and another six (Bahamas, Canada, Ireland, Slovenia, Trinidad and Tobago, and United Arab Emirates) are off track for two targets–the same number of targets, for example, as a low-income country like Uganda. Of course, advanced economies are typically off track for different reasons than lower-income countries. Canada and Ireland, for example, are both close in absolute terms to achieving 100 percent access to drinking water—at 99.8 and 97.9 percent, respectively, in 2015—but they have made slow if any progress in increasing access over the past decade. Meanwhile Uganda reports 79 percent access to drinking water in 2015, but that figure has been improving at an average rate of 1.5 percentage points per year, which puts them on track to reach 100 percent access by 2030. Thus "off-track" status is not intended to suggest equivalent needs across all countries. Instead, it simply highlights the importance of a universal policy framework that aspires to ensure all societies "leave no one behind."

The commonality of off-track status on access to sanitation underscores the need for careful country-by-country analysis. Twenty-two high-income countries have made zero progress or slightly regressed on this issue over the last 10 years. In comparison, only two of 30 low-income countries and 16 of 85 middle-income countries have made zero progress or are regressing, but many of these countries need to cover a much larger absolute distance to the goal. Uganda, for instance, registered 19.1 percent with access in 2015, on course to 22.6 percent in 2030. Meanwhile Canada has been stagnant at 99.8 percent access for many years, while Ireland has improved only slightly to reach 90.5 percent access as of 2015.

Figure 2 highlights how far off track different countries currently are for both water and sanitation. At one end of the spectrum, 60 countries are on a course to miss the water target by more than 5 percentage points. Meanwhile 99 countries are currently on a path to miss the sanitation target by at least the same increment. Somalia is furthest off course for water, achieving only 42 percent of its population with access by 2030. Togo is furthest behind on sanitation, currently reaching only 12 percent coverage by 2030.

Figure 2: Comparing 2030 trajectories for water and sanitation



For the most off-track countries and targets, is there a recent precedent for SDG success?

The countries furthest off track from SDG success clearly require major accelerations in progress. Table 3 shows recent rates of progress among off-track countries on the five indicators with available data—showing both the average and the range of rates—and then compares this to the rates the same countries require to achieve the target by 2030. It further lists the country with the fastest rate of progress on each indicator from 2005 to 2015, to assess whether that precedent would be adequate for the countries currently furthest off track.

Table 3: Average speed needed for off-track countries to meet the targets by 2030

	Current average speed ~2005–2015	Average speed needed	Recent precedent for furthest behind?	
Maternal mortality (min to max)	**2.4%** (-3.7% to 7.2%)	**9.6%*** (0.9% to 17.9%)*	No	Kazakhstan (12.2%)
Under-5 mortality (min to max)	**3.2%** (-3.1% to 5.8%)	**6.9%*** (0.6% to 11.5%)*	No	Rwanda (9.3%)
Neonatal mortality (min to max)	**2.0%** (-3.1% to 4.1%)	**5.2%** (1.7% to 8.9%)	Yes	Maldives (9.7%)
Access to water (min to max)	**0.3 pct. points** (-0.4 to 1.9 pct. points)	**1.2 pct. points** (~0.0 to 4.0 pct. points)	No	Cambodia (2.3 pct. points)
Acess to sanitation (min to max)	**0.3 pct. points** (-0.7 to 1.8 pct. points)	**2.2 pct. points** (~0.0 to 5.9 pct. points)	No	Lao PDR (2.8 pct. points)

Note: all averages are simple, unweighted averages across off-track countries
**excludes countries that meet target as of 2015 but are on (negative) trajectory to miss target by 2030*

Among the five indicators, neonatal mortality is the only one for which there is a reasonable recent precedent for the country furthest behind to achieve the 2030 target. Specifically, Angola had the highest neonatal mortality rate in 2015, at 49 deaths per 1,000 live births. To meet the SDG threshold by 2030, it needs to accelerate from its recent average declines of 1.4 percent per year to declines of 8.9 percent per year. Pakistan follows close behind, needing an annual rate of 8.5 percent, while the Central African Republic requires a rate of 8.1 percent. Reassuringly, from 2005-2015, China, Estonia, Macedonia, and the Maldives all reached comparable rates of progress.

For the other four indicators, there is no recent precedent for rates of progress that would allow the furthest behind countries to achieve the SDG target. However, each indicator does have an example of at least one country recently progressing at the speed required for the "average" currently off-track country. In other words, all indicators have a precedent for the typical off-track country still to succeed.

Another way to consider required SDG progress is to group off-track countries by how much each one needs to accelerate above their current rate of progress.

- To meet the maternal mortality target, 46 off-track countries need to increase their rate of progress by more than 4 percentage points per year. This includes 26 low-income countries and 20 middle-income countries. Twenty-four countries need to accelerate by 0 to 4 percentage points per year.

- For under-5 child mortality, 20 countries need at least a 4 percentage point annual acceleration, as do 21 countries for neonatal mortality. Twenty-nine countries need to accelerate progress on under-5 mortality by 0 to 4 percentage points per year, while 41 countries require the same range of acceleration for neonatal mortality.

- For water, 13 countries need to accelerate by at least 2 percentage point per year and 83 need to accelerate by 0 to 2 percentage points per year.

- For sanitation, 52 countries need to accelerate by at least 2 percentage point per year, including 29 requiring more than 4 percentage points. Ninety-five countries need to accelerate by between 0 and 2 percentage points per year.

- For undernourishment, data limitations prevent the same type of country tabulations. However, available data indicate that at least four regions will still have undernourishment by 2030: Latin America and the Caribbean, the Middle East and North Africa, South Asia, and sub-Saharan Africa. On current trajectories, sub-Saharan Africa is the furthest from the target by 2030. The region will need to double its current rate of progress from 0.6 to 1.2 percentage points per year. South Asia similarly needs to accelerate its annual rate of progress from 0.5 to 1.1 percentage points annually.

- For primary education, three regions require acceleration. Europe and Central Asia, the Middle East and North Africa require only slightly faster rates of progress. Sub-Saharan Africa's completion rates need to accelerate by 1 percentage point per year.

Conclusion

This policy brief presents a simple extrapolation methodology to help focus attention on the nature of cross-country progress that still needs to be instigated if the world is to have a chance at achieving its stated ambition of eliminating, by 2030, the many forms of extreme poverty. Some of the results unsurprisingly draw attention to low-income countries that still have substantial ground to cover. Other results offer a form of wake-up call for high-income countries that have a smaller relative problem to ad-

dress in meeting basic needs but have been too stagnant in promoting universal access for their citizens. Access to basic sanitation lags behind in more countries than any other issue, but it is far from the only challenge across indicators for health, education, undernutrition, and access to drinking water.

Our results suggest that the world's frontline in the fight to end extreme poverty can be found in 37 countries. These are the places not on track to achieve any of the four key poverty targets with adequate time-series data for assessment. They merit thoughtful prioritization among international cooperation efforts.

Importantly, countries beginning the SDG period from furthest behind will often need to outpace even the best recent cases of progress. The challenge will likely require new forms of policy coordination and delivery in those circumstances. The MDG period provided many forms of previously unexpected breakthroughs, most notably in the realm of global health, so the world needs to "double down" in extrapolating the organizational lessons from those successes.

Current 2030 trajectories also underscore the need for all countries to tackle their extreme poverty challenge. Out of 193 U.N. member states, fully 154 are off track from achieving at least one of the four benchmarks for maternal survival, child survival, access to water, and access to sanitation. This includes 30 low-income countries, 90 middle-income countries, and 33 high-income countries. There can be little question: the SDG challenge is universal.

References

Alkema L., Chou D., Hogan D., et al. 2016. "Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: A systematic analysis by the U.N. Maternal Mortality Estimation Inter-Agency Group." *The Lancet* 2016 387:462-474.

Chandy, Laurence, Hiroshi Kato, and Homi Kharas (eds). 2015. *The Last Mile in Ending Extreme Poverty*. Washington, DC: Brookings Institution Press.

Fukuda-Parr, Sakiko, Joshua Greenstein, and David Stewart. 2013. "How should MDG success and failure be judged: Faster progress or achieving the targets?" *World Development* 41: 19-30.

FAO, IFAD, and WFP. 2015. *The state of food insecurity in the world 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress*. Rome: FAO.

Kenny, Charles and Andy Sumner. 2011. "More money or more development: What have the MDGs achieved?" Center for Global Development Working Paper No. 278. Washington, DC: Center for Global Development.

McArthur, John W. 2015. "Agriculture's Role in Ending Extreme Poverty" in *The Last Mile in Ending Extreme Poverty*, edited by Laurence Chandy, Hiroshi Kato, and Homi Kharas. Washington, DC: Brookings Institution Press, pp. 175–218.

Nicolai, Susan, Chris Hoy, Tom Berliner, and Thomas Aedy. 2015. *Projecting Progress: Reaching the SDGs by 2030*. London: Overseas Development Institute.

Serajuddin, Umar, Hiroki Uematsu, Christina Wieser, Nobuo Yoshida, and Andrew Dabalen. 2015. "Data Deprivation: Another deprivation to end." Policy Research Working Paper no. 7252. Washington, DC: World Bank Group.

UNESCO. 2016. *Education for people and planet: Creating sustainable futures for all*. Paris: UNESCO.

U.N. Inter-agency Group for Child Mortality Estimation. 2015. "Estimates for under-five, infant and neonatal mortality." http://www.childmortality.org (accessed 7 November 2016).

World Bank. 2016a. "World Development Indicators." http://data.worldbank.org (accessed 7 October 2016).

World Bank. 2016b. *Monitoring global poverty: Report on the commission on global poverty.* Washington, DC: World Bank.

You, Danzehn, Lucia Hug, Simon Ejdemyr, Priscila Idele, Daniel Hogan, Colin Mathers, Patrick Gerland, Jin Rou New, and Leontine Alkema. 2015. "Global, regional, and national levels and trends in under-5 mortality between 1990 and 2015, with scenario-based projections to 2030: A systematic analysis by the U.N. Interagency Group for Child Mortality Estimation." *The Lancet* 386 (10010): 2275-2286.

BROOKINGS
1775 Massachusetts Ave., NW
Washington, DC 20036
www.brookings.edu/global