



## Human Development for Everyone

### *Briefing note for countries on the 2016 Human Development Report*

## Bhutan

### **Introduction**

The 2016 Human Development Report (HDR) focuses on how human development can be ensured for every one—now and in future. It starts with an account of the hopes and challenges of today's world, envisioning where humanity wants to go. Our vision draws from and builds on the 2030 Agenda for Sustainable Development that the 193 member states of the United Nations endorsed in 2015—and the 17 Sustainable Development Goals (SDGs) the world has committed to achieve.

The Report explores who has been left behind in human development progress—and why. Human development progress over the past 25 years has been impressive on many fronts. But the gains have not been universal. There are imbalances across countries; socioeconomic, ethnic and racial groups; urban and rural areas; and women and men. Millions of people are unable to reach their full potential in life because they suffer deprivations in multiple dimensions of human development.

Besides mapping the nature and location of deprivations, the Report raises some specific analytical and assessment issues. To find out if everyone benefits from the human development progress, an *average* perspective is not going to work—a disaggregated approach is needed. Nor will a purely quantitative assessment succeed—qualitative aspects are needed, too. Data on agency freedom also need to be reviewed, particularly on voice and accountability. Finally, good generation and dissemination of data are important, requiring further in-depth research, experiments, consultations and alliance building among stakeholders.

The Report also identifies the national policies and key strategies to ensure that will enable every human being achieve at least basic human development and to sustain and protect the gains. And it addresses the structural challenges of global institutions and presents options for reform.

This briefing note is organized into nine sections. The first section presents information on the country coverage and methodology of the Statistical Annex of the 2016 HDR. The next eight sections provide information about key indicators of human development including the Human Development Index (HDI), the Inequality-adjusted Human Development Index (IHDI), the Gender Development Index (GDI), the Gender Inequality Index (GII), and the Multidimensional Poverty Index (MPI). The 2016 HDR introduces two experimental dashboards – on life-course gender gap and on sustainable development.

It is important to note that national and international data can differ because international agencies standardize national data to allow comparability across countries and in some cases may not have access to the most recent national data. We encourage national partners to explore the issues raised in the HDR with the most relevant and appropriate data from national and international sources.

### **Country coverage and the methodology of the Statistical Annex of the 2016 HDR**

The Statistical Annex of the 2016 HDR presents the 2015 HDI (values and ranks) for 188 countries and UN-recognized territories, along with the IHDI for 151 countries, the GDI for 160 countries, the GII for 159 countries, and the MPI for 102 countries. Country rankings and values of the annual Human Development

Index (HDI) are kept under strict embargo until the global launch and worldwide electronic release of the HDR.

It is misleading to compare values and rankings with those of previously published reports, because of revisions and updates of the underlying data and adjustments to methodology. Readers are advised to assess changes in HDI ranks between 2014 and 2015 using column 1 and column 9 of table 1 ( Human Development Index and its components) and trends in HDI values by referring to table 2 (Human Development Index Trends) in the Statistical Annex of the report. Tables 1 and 2 are based on consistent indicators, methodology and time-series data and thus show real changes in values and ranks over time, reflecting the actual progress countries have made. Small changes in values should be interpreted with caution as they may not be statistically significant due to sampling variation.

Unless otherwise specified in the source, tables use data available to the Human Development Report Office (HDRO) as of 1 September 2016. All indices and indicators, along with technical notes on the calculation of composite indices, and additional source information are available online at <http://hdr.undp.org/en/data>

For further details on how each index is calculated please refer to [Technical notes 1-7](#) and the associated background papers available on the Human Development Report website: <http://hdr.undp.org/en/data>

## **Human Development Index (HDI)**

The HDI is a summary measure for assessing progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. A long and healthy life is measured by life expectancy at birth. Knowledge level is measured by mean years of education among the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and access to learning and knowledge by expected years of schooling for children of school-entry age, which is the total number of years of schooling a child of school-entry age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life. The standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2011 international dollars converted using purchasing power parity (PPP) conversion rates.

To ensure as much cross-country comparability as possible, the HDI is based primarily on international data from the United Nations Population Division (the life expectancy at birth data), the United Nations Educational, Scientific and Cultural Organization Institute for Statistics (the mean years of schooling and expected years of schooling data) and the World Bank (the GNI per capita data). As stated in the introduction, the HDI values and ranks in this year's report are not comparable to those in past reports (including the 2015 HDR) because of a number of revisions to the component indicators. To allow for assessment of progress in HDIs, the 2016 report includes recalculated HDIs from 1990 to 2015 using consistent series of data. For more details see [Technical note 1](#).

## **Bhutan's HDI value and rank**

Bhutan's HDI value for 2015 is 0.607— which put the country in the medium human development category— positioning it at 132 out of 188 countries and territories.

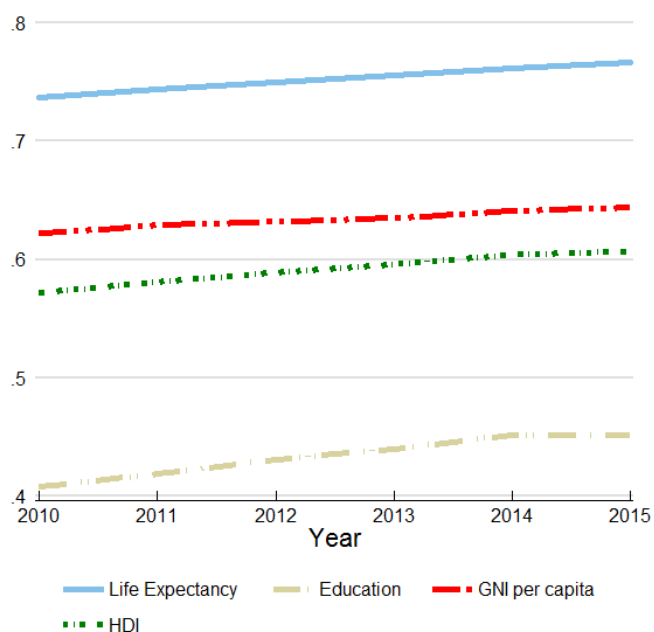
Between 2010 and 2015, Bhutan's HDI value increased from 0.572 to 0.607, an increase of 6.0 percent. Table A reviews Bhutan's progress in each of the HDI indicators. Between 1990 and 2015, Bhutan's life expectancy at birth increased by 17.4 years, mean years of schooling increased by 0.8 years and expected years of schooling increased by 7.1 years. Bhutan's GNI per capita increased by about 236.2 percent between 1990 and 2015.

**Table A: Bhutan's HDI trends based on consistent time series data**

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1990	52.5	5.4		2,106	
1995	56.4	6.4		2,482	
2000	60.7	7.6		3,593	
2005	64.9	9.6		4,496	
2010	67.9	11.9	2.3	6,124	0.572
2011	68.3	12.3	2.3	6,452	0.581
2012	68.7	12.6	2.4	6,567	0.589
2013	69.1	12.5	2.8	6,709	0.596
2014	69.5	12.5	3,1	6,946	0.604
2015	69.9	12.5	3.1	7,081	0.607

Figure 1 below shows the contribution of each component index to Bhutan's HDI since 2010.

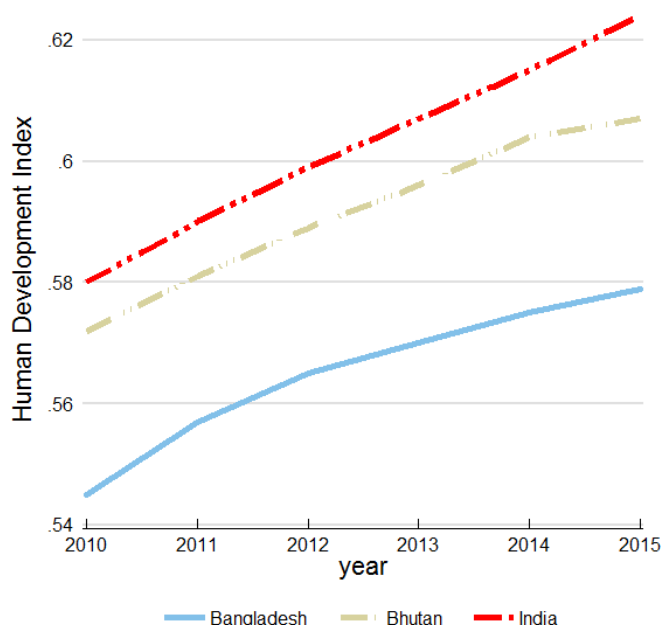
**Figure 1: Trends in Bhutan's HDI component indices 2010-2015**



### Assessing progress relative to other countries

The human development progress, as measured by the HDI, can usefully be compared to other countries. For instance, during the period between 2010 and 2015 Bhutan, Bangladesh and India experienced different degrees of progress toward increasing their HDIs (see figure 2).

**Figure 2: HDI trends for Bhutan, Bangladesh and India, 2010-2015**



Bhutan's 2015 HDI of 0.607 is below the average of 0.631 for countries in the medium human development group and below the average of 0.621 for countries in South Asia. From South Asia, countries which are close to Bhutan in 2015 HDI rank and to some extent in population size are Maldives and Nepal, which have HDIs ranked 105 and 144 respectively (see table B).

**Table B: Bhutan's HDI and component indicators for 2015 relative to selected countries and groups**

	HDI value	HDI rank	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP US\$)
<b>Bhutan</b>	0.607	132	69.9	12.5	3.1	7,081
<b>Maldives</b>	0.701	105	77.0	12.7	6.2	10,383
<b>Nepal</b>	0.558	144	70.0	12.2	4.1	2,337
<b>South Asia</b>	0.621	—	68.7	11.3	6.2	5,799
<b>Medium HDI</b>	0.631	—	68.6	11.5	6.6	6,281

### **Inequality-adjusted HDI (IHDI)**

The HDI is an average measure of basic human development achievements in a country. Like all averages, the HDI masks inequality in the distribution of human development across the population at the country level. The 2010 HDR introduced the IHDI, which takes into account inequality in all three dimensions of the HDI by 'discounting' each dimension's average value according to its level of inequality. The IHDI is basically the HDI discounted for inequalities. The 'loss' in human development due to inequality is given by the difference between the HDI and the IHDI, and can be expressed as a percentage. As the inequality in a country increases, the loss in human development also increases. We also present the coefficient of human inequality as a direct measure of inequality which is an unweighted average of inequalities in three dimensions. The IHDI is calculated for 151 countries. For more details see [Technical note 2](#).

Bhutan's HDI for 2015 is 0.607. However, when the value is discounted for inequality, the HDI falls to 0.428, a loss of 29.4 percent due to inequality in the distribution of the HDI dimension indices. Maldives and Nepal show losses due to inequality of 24.6 percent and 27.0 percent respectively. The average loss due to

inequality for medium HDI countries is 25.7 percent and for South Asia it is 27.7 percent. The Human inequality coefficient for Bhutan is equal to 28.4 percent.

**Table C: Bhutan's IHDI for 2015 relative to selected countries and groups**

	IHDI value	Overall loss (%)	Human inequality coefficient (%)	Inequality in life expectancy at birth (%)	Inequality in education (%)	Inequality in income (%)
<b>Bhutan</b>	0.428	29.4	28.4	20.7	44.8	19.6
<b>Maldives</b>	0.529	24.6	23.4	7.1	40.0	23.2
<b>Nepal</b>	0.407	27.0	25.8	19.6	43.9	13.9
<b>South Asia</b>	0.449	27.7	27.1	23.9	39.5	17.8
<b>Medium HDI</b>	0.469	25.7	25.5	22.6	33.7	20.1

### **Gender Development Index (GDI)**

In the 2014 HDR, HDRO introduced a new measure, the GDI, based on the sex-disaggregated Human Development Index, defined as a ratio of the female to the male HDI. The GDI reflects gender inequalities in achievement in the same three dimensions of the HDI: health (measured by female and male life expectancy at birth), education (measured by female and male expected years of schooling for children and mean years for adults aged 25 years and older); and command over economic resources (measured by female and male estimated GNI per capita). For details on how the index is constructed refer to [Technical note 3](#). Country groups are based on absolute deviation from gender parity in HDI. This means that the grouping takes into consideration inequality in favour of men or women equally.

The GDI is calculated for 160 countries in the 2015 HDR. The female HDI value for Bhutan is 0.573 in contrast with 0.637 for males, resulting in a GDI value of 0.900, which places the country into Group 5. In comparison, GDI values for Maldives and Nepal are 0.937 and 0.925 respectively (see Table D).

**Table D: Bhutan's GDI for 2015 relative to selected countries and groups**

	Life expectancy at birth		Expected years of schooling		Mean years of schooling		GNI per capita		HDI values		F-M ratio
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	GDI value
<b>Bhutan</b>	70.1	69.6	12.6	12.4	2.1	4.2	5,657	8,308	0.573	0.637	0.900
<b>Maldives</b>	78.0	76.0	12.8	12.7	6.2	6.3	7,155	13,591	0.676	0.721	0.937
<b>Nepal</b>	71.5	68.6	12.7	12.2	3.2	5.0	1,979	2,718	0.538	0.582	0.925
<b>South Asia</b>	70.2	67.4	11.3	11.1	4.9	7.8	2,278	9,114	0.549	0.667	0.822
<b>Medium HDI</b>	70.4	66.8	11.5	11.3	5.6	7.8	3,314	9,131	0.582	0.668	0.871

### **Gender Inequality Index (GII)**

The 2010 HDR introduced the GII, which reflects gender-based inequalities in three dimensions – reproductive health, empowerment, and economic activity. Reproductive health is measured by maternal mortality and adolescent birth rates; empowerment is measured by the share of parliamentary seats held by women and attainment in secondary and higher education by each gender; and economic activity is measured by the labour market participation rate for women and men. The GII can be interpreted as the loss in human development due to inequality between female and male achievements in the three GII dimensions. For more details on GII please see [Technical note 4](#).

Bhutan has a GII value of 0.477, ranking it 110 out of 159 countries in the 2015 index. In Bhutan, 8.3 percent of parliamentary seats are held by women, and 5.8 percent of adult women have reached at least a secondary level of education compared to 13.4 percent of their male counterparts. For every 100,000 live births, 148 women die from pregnancy related causes; and the adolescent birth rate is 21.4 births per 1,000 women of ages 15-19. Female participation in the labour market is 58.7 percent compared to 72.8 for men.

In comparison, Maldives and Nepal are ranked at 64 and 115 respectively on this index.

**Table E: Bhutan's GII for 2015 relative to selected countries and groups**

	GII value	GII Rank	Maternal mortality ratio	Adolescent birth rate	Female seats in parliament (%)	Population with at least some secondary education (%)		Labour force participation rate (%)	
						Female	Male	Female	Male
<b>Bhutan</b>	0.477	110	148	21.4	8.3	5.8	13.4	58.7	72.8
<b>Maldives</b>	0.312	64	68	6.7	5.9	34.3	30.9	57.3	78.8
<b>Nepal</b>	0.497	115	258	71.9	29.5	24.1	41.2	79.7	86.8
<b>South Asia</b>	0.520	—	175	33.7	17.4	36.9	58.6	28.3	79.4
<b>Medium HDI</b>	0.491	—	164	40.8	19.9	40.4	57.6	37.2	79.4

Maternal mortality ratio is expressed in number of deaths per 100,000 live births and adolescent birth rate is expressed in number of births per 1,000 women ages 15-19.

### **Multidimensional Poverty Index (MPI)**

The 2010 HDR introduced the MPI, which identifies multiple overlapping deprivations suffered by households in 3 dimensions: education, health and living standards. The education and health dimensions are each based on two indicators, while standard of living is based on six indicators. All of the indicators needed to construct the MPI for a country are taken from the same household survey. The indicators are weighted to create a deprivation score, and the deprivation scores are computed for each household in the survey. A deprivation score of 33.3 percent (one-third of the weighted indicators) is used to distinguish between the poor and nonpoor. If the household deprivation score is 33.3 percent or greater, the household (and everyone in it) is classified as multidimensionally poor. Households with a deprivation score greater than or equal to 20 percent but less than 33.3 percent live *near multidimensional poverty*. Finally, households with a deprivation score greater than or equal to 50 percent live in severe multidimensional poverty. The MPI is calculated for 102 developing countries in the 2015 HDR. Definitions of deprivations in each dimension, as well as methodology of the MPI are given in [Technical note 5](#).

The most recent survey data that were publically available for Bhutan's MPI estimation refer to 2010. In Bhutan, 29.4 percent of the population (212 thousand people) are multidimensionally poor while an additional 18.0 percent live near multidimensional poverty (129 thousand people). The breadth of deprivation (intensity) in Bhutan, which is the average deprivation score experienced by people in multidimensional poverty, is 43.5 percent. The MPI, which is the share of the population that is multi-dimensionally poor, adjusted by the intensity of the deprivations, is 0.128. Maldives and Nepal have MPIs of 0.008 and 0.116 respectively.

Table F compares multidimensional poverty with income poverty, measured by the percentage of the population living below PPP US\$1.90 per day. It shows that income poverty only tells part of the story. The multidimensional poverty headcount is 27.2 percentage points higher than income poverty. This implies that individuals living above the income poverty line may still suffer deprivations in education, health and other living conditions. Table F also shows the percentage of Bhutan's population that lives near multidimensional poverty and that lives in severe multidimensional poverty. The contributions of deprivations in each dimension to overall poverty complete a comprehensive picture of people living in multidimensional poverty in Bhutan. Figures for Maldives and Nepal are also shown in the table for comparison.

**Table F: The most recent MPI for Bhutan relative to selected countries**

	Survey year	MPI value	Head-count (%)	Intensity of deprivations (%)	Population share (%)			Contribution to overall poverty of deprivations in (%)		
					Near poverty	In severe poverty	Below income poverty line	Health	Education	Living Standards
<b>Bhutan</b>	2010	0.128	29.4	43.5	18.0	8.8	2.2	26.3	40.3	33.4
<b>Maldives</b>	2009	0.008	2.0	37.5	8.5	0.1	7.3	60.2	27.8	11.9
<b>Nepal</b>	2014	0.116	26.6	43.7	14.4	9.3	15.0	25.6	32.2	42.2

### Dashboard on Life-course gender gap

Life-course gender gap dashboard contains a selection of 14 key indicators that display gender gaps over the life course – childhood and adolescence, adulthood and older age. The indicators refer to health, education, labour market and work, and social protection. Some indicators are presented only for women and some are given in the form of female-to-male ratio. Three-color coding is used to visualize partial grouping of countries by each indicator in this table. Countries are grouped partially by their performance in each indicator into three groups of approximately equal size (terciles), thus, there is the top third, the middle third and the bottom third. These three groups are colored. Sex ratio at birth is an exception - countries are grouped into two groups: the natural group with values between 1.04-1.07 (inclusively) and the gender-biased group if the value is outside the natural range. Countries with values of a female-to-male ratio concentrated around 1 form the group with the top performers in that indicator. Deviations from parity are treated equally irrespectively of which gender is overachieving. The coloring provides information about a country's performance relative to others. It can be seen as a simple visualization tool as it helps the users to immediately picture the country's performance. It also allows grouping countries by each indicator using a color scale. More details about partial grouping in this table are given in [Technical note 6](#).

Table G provides the number of indicators in which Bhutan performs: better than at least two thirds of countries (i.e., it is among the top third performers), better than at least one third but worse than at least one third (i.e., it is among the medium third performers), and worse than at least two thirds of countries (i.e., it is among the bottom third performers). Figures for Maldives and Nepal are also shown in the table for comparison.

**Table G: Summary of Bhutan's performance in the Life-course gender gap dashboard relative to selected countries**

	Childhood and youth (6 indicators)			Adulthood (6 indicators)			Older age (2 indicators)			Overall (14 indicators)			Missing indicators
	Top third	Middle third	Bottom third	Top third	Middle third	Bottom third	Top third	Middle third	Bottom third	Top third	Middle third	Bottom third	
	Number of indicators												
<b>Bhutan</b>	2	3	1	0	0	6	0	1	0	2	4	7	1
<b>Maldives</b>	1	2	0	0	3	3	0	1	0	1	6	3	4
<b>Nepal</b>	2	1	3	1	1	3	0	0	1	3	2	7	2

## Dashboard on Sustainable development

Sustainable development dashboard contains a selection of 15 key indicators that cover environmental, economic and social sustainable development. Environmental sustainability indicators represent a mix of level and change indicators related to renewable energy consumption, carbon-dioxide emissions, change in forest area and fresh water withdrawals. Forest area as percentage of the total land area is given in the table but is not used for comparison, instead, the total change in forest area between 1990 and 2015 is used. Economic sustainability indicators look at adjusted net savings, external debt stock, natural resources depletion, diversity of economy and government's spending on research and development. Social sustainability is captured by changes in income and gender inequality, multidimensional poverty and the projected old age dependency ratio. Three-color coding is used to visualize partial grouping of countries by each indicator in this table. Countries are grouped by each indicator into three groups of approximately equal sizes (terciles), thus there is the best third, the middle third and the bottom third. The intention is not to suggest the thresholds or target values for these indicators but to allow a crude assessment of country's performance relative to others. More details about partial grouping in this table are given in [Technical note 7](#).

Table H provides the number of indicators in which Bhutan performs: better than at least two thirds of countries (i.e., it is among the top third performers), better than at least one third but worse than at least one third (i.e., it is among the medium third performers), and worse than at least two thirds of countries (i.e., it is among the bottom third performers). Figures for Maldives and Nepal are also shown in the table for comparison.

**Table H: Summary of Bhutan's performance in the Sustainable development dashboard relative to selected countries**

	Environmental sustainability (5 indicators)			Economic sustainability (5 indicators)			Social sustainability (4 indicators)			Overall (14 indicators)			Missing indicators
	Top third	Middle third	Bottom third	Top third	Middle third	Bottom third	Top third	Middle third	Bottom third	Top third	Middle third	Bottom third	
	Number of indicators												
<b>Bhutan</b>	4	0	1	1	1	2	0	2	0	5	3	3	3
<b>Maldives</b>	0	2	3	1	2	1	1	2	0	2	6	4	2
<b>Nepal</b>	2	1	2	3	2	0	2	2	0	7	5	2	0