Human Development Report 2014

Sustaining Human Progress:
Reducing Vulnerabilities and Building Resilience

Explanatory note on the 2014 Human Development Report composite indices

Botswana

HDI values and rank changes in the *2014 Human Development Report*

Introduction

The *2014 Human Development Report (HDR)* presents the 2014 Human Development Index (HDI) (values and ranks) for 187 countries and UN-recognized territories, along with the Inequality-adjusted HDI for 145 countries, the Gender Development Index for 148 countries, the Gender Inequality Index for 149 countries, and the Multidimensional Poverty Index for 91 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 Human Development Report.

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 goalposts. Readers are advised to assess progress in HDI values by referring to table 2 ('Human Development Index Trends') in the Statistical Annex of the report. Table 2 is based on consistent indicators, methodology and time-series data and thus shows 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. Generally speaking, changes at the level of the third decimal place in any of the composite indices are considered insignificant.

Unless otherwise specified in the source, tables use data available to the HDRO as of 15 November 2013. 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 1-5 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 long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. Just as in the 2013 HDR, a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) 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 ii) 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. Standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2011 international dollars converted using purchasing power parity (PPP) 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 United Nations Educational, Scientific and Cultural

Organization Institute for Statistics and the World Bank. 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 2013 HDR) because of a number of revisions to the component indicators. To allow for assessment of progress in HDIs, the 2014 report includes recalculated HDIs from 1980 to 2013.

Botswana's HDI value and rank

Botswana's HDI value for 2013 is 0.683— which is in the medium human development category— positioning the country at 109 out of 187 countries and territories. Between 1980 and 2013, Botswana's HDI value increased from 0.470 to 0.683, an increase of 45.4 percent or an average annual increase of about 1.14 percent.
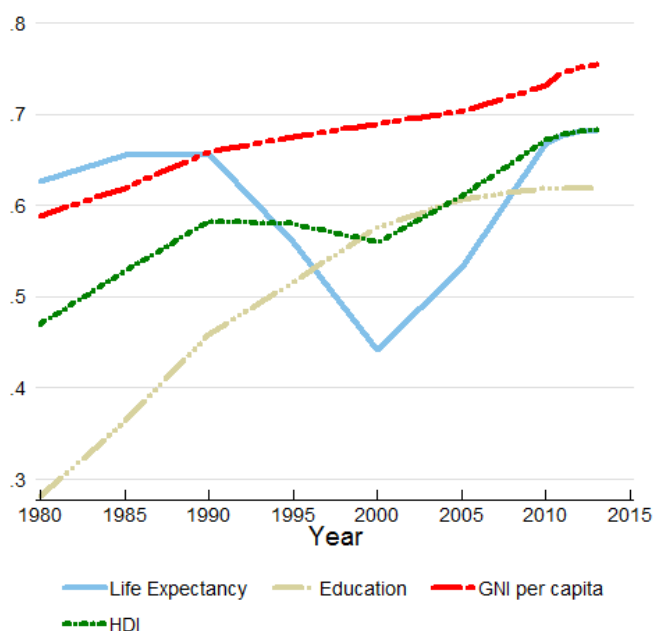
Table A reviews Botswana's progress in each of the HDI indicators. Between 1980 and 2013, Botswana's life expectancy at birth increased by 3.7 years, mean years of schooling increased by 6.5 years and expected years of schooling increased by 4.3 years. Botswana's GNI per capita increased by about 199.7 percent between 1980 and 2013.

Table A: Botswana's HDI trends based on consistent time series data and new goalposts

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP$)	HDI value
1980	60.7	7.4	2.3	4,935	0.470
1985	62.7	8.5	3.8	6,025	0.528
1990	62.7	10.0	5.4	7,833	0.583
1995	56.3	10.6	6.6	8,751	0.580
2000	48.7	11.7	7.5	9,611	0.560
2005	54.6	12.0	8.2	10,486	0.610
2010	63.4	11.7	8.8	12,763	0.672
2011	64.0	11.7	8.8	13,930	0.678
2012	64.2	11.7	8.8	14,400	0.681
2013	64.4	11.7	8.8	14,792	0.683

Figure 1 below shows the contribution of each component index to Botswana's HDI since 1980.
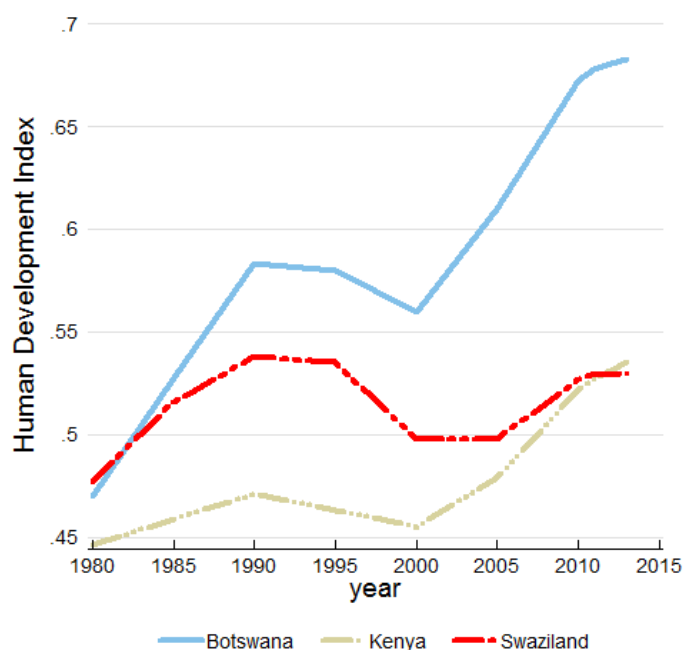
Figure 1: Trends in Botswana's HDI component indices 1980-2013

Assessing progress relative to other countries

Long-term progress can be usefully compared to other countries. For instance, during the period between 1980 and 2013 Botswana, Swaziland and Kenya experienced different degrees of progress toward increasing their HDIs (see figure 2).

Figure 2: Trends in Botswana, Swaziland and Kenya's HDI 1980-2013

Botswana's 2013 HDI of 0.683 is above the average of 0.614 for countries in the medium human development group and above the average of 0.502 for countries in Sub-Saharan Africa. From Sub-Saharan Africa, countries which are close to Botswana in 2013 HDI rank and to some extent in population size are Gabon and Namibia, which have HDIs ranked 112 and 127 respectively (see table B).

Table B: Botswana's HDI indicators for 2013 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$)
Botswana	0.683	109	64.4	11.7	8.8	14,792
Gabon	0.674	112	63.5	12.3	7.4	16,977
Namibia	0.624	127	64.5	11.3	6.2	9,185
Sub-Saharan Africa	0.502	—	56.8	9.7	4.8	3,152
Medium HDI	0.614	—	67.9	11.7	5.5	5,960

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 Inequality-Adjusted HDI (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. For more details see technical note 2.

Botswana's HDI for 2013 is 0.683. However, when the value is discounted for inequality, the HDI falls to 0.422, a loss of 38.2 percent due to inequality in the distribution of the dimension indices. Gabon and Namibia show losses due to inequality of 24.0 percent and 43.6 percent respectively. The average loss due to inequality for medium HDI countries is 25.6 percent and for Sub-Saharan Africa it is 33.6 percent. The Human inequality coefficient for Botswana is equal to 36.5 percent.

Table C: Botswana's IHDI for 2013 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 (%)
Botswana	0.422	38.2	36.5	21.9	32.1	55.5
Gabon	0.512	24.0	24.0	28.0	23.5	20.4
Namibia	0.352	43.6	39.3	21.7	27.8	68.3
Sub-Saharan Africa	0.334	33.6	33.5	36.6	35.7	28.1
Medium HDI	0.457	25.6	25.2	21.9	35.1	18.6

Gender Inequality Index (GII)

The Gender Inequality Index (GII) 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 3.)

Botswana has a GII value of 0.486, ranking it 100 out of 149 countries in the 2013 index. In Botswana, 7.9 percent of parliamentary seats are held by women, and 73.6 percent of adult women have reached at least a secondary level of education compared to 77.3 percent of their male counterparts. For every 100,000 live births, 160.0 women die from pregnancy related causes; and the adolescent birth rate is 44.2 births per 1000 live births. Female participation in the labour market is 71.8 percent compared to 81.5 for men.

In comparison, Gabon and Namibia are ranked at 108 and 87 respectively on this index.

Table D: Botswana's GII for 2013 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
Botswana	0.486	100	160.0	44.2	7.9	73.6	77.3	71.8	81.5
Gabon	0.508	108	230.0	103.0	16.7	53.8	34.7	56.0	65.1
Namibia	0.450	87	200.0	54.9	25.0	33.0	34.0	75.2	82.2
Sub-Saharan Africa	0.575	—	474.0	110.0	21.7	24.2	32.6	63.6	76.4
Medium HDI	0.502	—	186.0	42.8	17.5	44.7	53.2	38.7	80.0

Gender Development Index (GDI)

In the 2014 HDR, we introduce a new measure, the Gender Development Index (GDI) based on the sex-disaggregated Human Development Index, defined as a ratio of the female to the male HDI. The GDI measures gender inequalities in achievement in three basic dimensions of human development—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 4. Country rankings are based on absolute deviation from gender parity in HDI. What this means is that ranking takes into consideration inequality in favour of men or women equally.

The GDI is calculated for 148 countries. The 2013 female HDI value for Botswana is 0.669 in contrast with 0.694 for males, resulting in a GDI value of 0.964. In comparison, the GDI value for Namibia is 0.978 (see Table E).

Table E: Botswana's GDI value and its components 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
Botswana	66.8	62.1	11.7	11.6	8.7	9.0	11,491	18,054	0.669	0.694	0.964
Namibia	67.1	61.7	11.4	11.3	6.3	6.1	7,288	11,196	0.616	0.631	0.978
Sub-Saharan Africa	58.0	55.6	8.8	10.1	3.7	5.4	2,492	3,812	0.460	0.531	0.867
Medium HDI	70.0	65.9	11.4	11.8	4.7	6.4	3,199	8,619	0.565	0.646	0.875

Multidimensional Poverty Index (MPI)

The 2010 HDR introduced the Multidimensional Poverty Index (MPI), which identifies multiple deprivations in the same households in education, health and living standards. The education and health dimensions are each based on two indicators, while the standard of living dimension is based on six indicators. All of the indicators needed to construct the MPI for a household 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 classed as multidimensionally poor. Households with a deprivation score greater than or equal to 20 percent but less than 33.3 percent are *near multidimensional poverty*. Definitions of deprivations in each dimension, as well as methodology of the MPI are given in Technical note 5 and in Calderon and Kovacevic 2014. Due to a lack of relevant data, the MPI has not been calculated for this country.