



The Rise of the South: Human Progress in a Diverse World

Explanatory note on 2013 HDR composite indices

Madagascar

HDI values and rank changes in the 2013 Human Development Report

Introduction

The *2013 Human Development Report* presents Human Development Index (HDI) values and ranks for 187 countries and UN-recognized territories, along with the Inequality-adjusted HDI for 132 countries, the Gender Inequality Index for 148 countries, and the Multidimensional Poverty Index for 104 countries. Country rankings and values in 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 the underlying data and methods have changed. Readers are advised in the Report 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. Caution is requested when interpreting small changes in values because they may not be statistically significant due to the sampling variation. Generally speaking, changes in third decimal of all composite indices are considered insignificant.

For further details on how each index is calculated please refer to Technical Notes 1-4 and the associated background papers available on the Human Development Report website.

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. As in the 2011 HDR a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) mean years of schooling for 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-entrance age, which is the total number of years of schooling a child of school-entrance 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 2005 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 (UNESCO) Institute for Statistics (UIS) 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 2011 HDR) because of a number of revisions done to the component indicators by the mandated

agencies. To allow for assessment of progress in HDIs, the 2013 report includes recalculated HDIs from 1980 to 2012.

Madagascar's HDI value and rank

Madagascar's HDI value for 2012 is 0.483—in the low human development category—positioning the country at 151 out of 187 countries and territories. Between 2000 and 2012, Madagascar's HDI value increased from 0.428 to 0.483, an increase of 13 percent or average annual increase of about 1.0 percent.

The rank of Madagascar's HDI for 2011 based on data available in 2012 and methods used in 2012 was—151 out of 187 countries. In the 2011 HDR, Madagascar was ranked 151 out of 187 countries. However, it is misleading to compare values and rankings with those of previously published reports, because the underlying data and methods have changed.

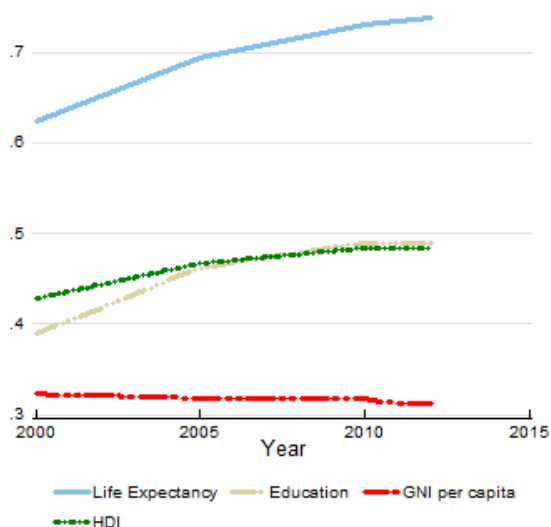
Table A reviews Madagascar's progress in each of the HDI indicators. Between 1980 and 2012, Madagascar's life expectancy at birth increased by 18.7 years and expected years of schooling increased by 2.4 years. Mean years of schooling was based on a national survey. Madagascar's GNI per capita decreased by about 35 percent between 1980 and 2012.

Table A: Madagascar's HDI trends based on consistent time series data, new component indicators and new methodology

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2005 PPP\$)	HDI value
1980	48.2	8		1,278	
1985	49.3	8.1		1,007	
1990	50.7	6.6		0,997	
1995	54.9	6.6		0,836	
2000	59.7	6.6	5.2	0,891	0.428
2005	64.1	9.3	5.2	0,860	0.467
2010	66.5	10.4	5.2	0,856	0.484
2011	66.7	10.4	5.2	0,833	0.483
2012	66.9	10.4	5.2	0,828	0.483

Figure 1 below shows the contribution of each component index to Madagascar's HDI since 2000.

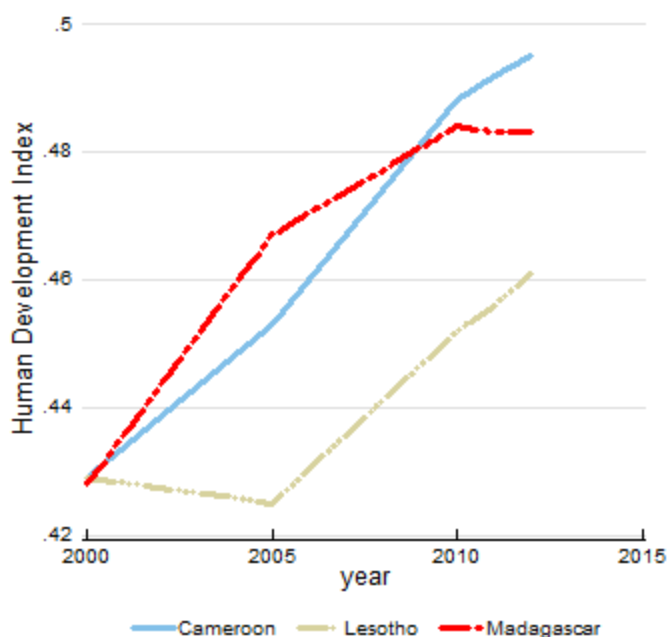
Figure 1: Trends in Madagascar's HDI component indices 2000-2012



Assessing progress relative to other countries

Long-term progress can be usefully assessed relative to other countries—both in terms of geographical location and HDI value. For instance, during the period between 2000 and 2012 Madagascar, Lesotho and Cameroon experienced different degrees of progress toward increasing their HDIs (see figure 2).

Figure 2: Trends in Madagascar's HDI 2000-2012



Madagascar's 2012 HDI of 0.483 is above the average of 0.466 for countries in the low human development group and above the average of 0.475 for countries in Sub-Saharan Africa. From Sub-Saharan Africa, countries which are close to Madagascar in 2012 HDI rank and population size are Cameroon and Uganda, which have HDIs ranked 150 and 161 respectively (see table B).

Table B: Madagascar's HDI indicators for 2012 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\$)
Madagascar	0.483	151	66.9	10.4	5.2	0,828
Cameroon	0.495	150	52.1	10.9	5.9	2,114
Uganda	0.456	161	54.5	11.1	4.7	1,168
Sub-Saharan Africa	0.475	—	54.9	9.3	4.7	2,010
Low HDI	0.466	—	59.1	8.5	4.2	1,633

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 HDI can be viewed as an index of 'potential' human development and the IHDI as an index of actual human development. The 'loss' in potential human development due to inequality is given by the difference between the HDI and the IHDI, and can be expressed as a percentage. (For more details see technical note 2).

Madagascar's HDI for 2012 is 0.483. However, when the value is discounted for inequality, the HDI falls to 0.335, a loss of 30.7 percent due to inequality in the distribution of the dimension indices. Cameroon and Uganda, show losses due to inequality of 33.4 percent and 33.6 percent respectively. The average loss due to inequality for low HDI countries is 33.5 percent and for Sub-Saharan Africa it is 35 percent.

Table C: Madagascar's IHDI for 2012 relative to selected countries and groups

	IHDI value	Overall Loss (%)	Loss due to inequality in life expectancy at birth (%)	Loss due to inequality in education (%)	Loss due to inequality in income (%)
Madagascar	0.335	30.7	25.6	30.1	36.1
Cameroon	0.33	33.4	43	35.3	19.9
Uganda	0.303	33.6	39.1	32.2	29.1
Sub-Saharan Africa	0.309	35	39	35.3	30.4
Low HDI	0.31	33.5	35.7	38.7	25.6

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 fertility rates; empowerment is measured by the share of parliamentary seats held by each gender and attainment at secondary and higher education by each gender; and economic activity is measured by the labour market participation rate for each gender. The GII replaced the previous Gender-related Development Index and Gender Empowerment Index. The GII shows 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 in the Statistics Annex). Due to a lack of relevant data, the GII has not been calculated for this country.

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 standard of living. The education and health dimensions are based on two indicators each 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, and the deprivation scores are computed for each household in the survey. A cut-off of 33.3 percent, which is the equivalent of 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, that household (and everyone in it) is multidimensionally poor. Households with a deprivation score greater than or equal to 20 percent but less than 33.3 percent are *vulnerable* to or at risk of becoming multidimensionally poor.

The most recent survey data available for estimating MPI figures for Madagascar were collected in 2008/2009. In Madagascar 66.9 percent of the population lived in multidimensional poverty (the MPI 'head count') while an additional 17.9 percent were vulnerable to multiple deprivations. The intensity of deprivation – that is, the average percentage of deprivation experienced by people living in multidimensional poverty – in Madagascar was 53.3 percent. The country's MPI value, which is the share of the population that is multi-dimensionally poor adjusted by the intensity of the deprivations, was 0.357. Cameroon and Uganda had MPI values of 0.287 and 0.367 respectively.

Table E compares income poverty, measured by the percentage of the population living below PPP US\$1.25 per day, and multidimensional deprivations in Madagascar. It shows that income poverty only tells part of the story. The multidimensional poverty headcount is 14.4 percentage points lower than income poverty. This implies that individuals living below the income poverty line may have access to non-income resources. Table E also shows the percentage of Madagascar's population that live in severe poverty (deprivation score is 50 percent or more) and that are vulnerable to poverty (deprivation score between 20 and 30 percent). The contributions of deprivations in each dimension to overall poverty

complete a comprehensive picture of people living in poverty in Madagascar. Figures for Cameroon and Uganda are also shown in the table for comparison.

Table E: The most recent MPI figures for Madagascar relative to selected countries

	Survey year	MPI value	Headcount (%)	Intensity of deprivation (%)	Population			Contribution to overall poverty of deprivations in		
					Vulnerable to poverty (%)	In severe poverty (%)	Below income poverty line (%)	Health	Education	Living Standards
Madagascar	2008/2009	0.357	66.9	53.3	17.9	35.4	81.3	16.7	34.3	49.1
Cameroon	2004	0.287	53.3	53.9	19.3	30.4	9.6	24.5	25.7	49.8
Uganda	2011	0.367	69.9	52.5	19	31.2	51.5	34.1	15.6	50.4