

The indicators and indices presented in the Statistical Annex of the 2020 Human Development Report depict the state of human development before the COVID-19 pandemic based on available data for 2019 and earlier years. Data reflecting changes caused by the COVID-19 pandemic and its socioeconomic fallout in 2020 will be available in 2021 and will be presented in tables and related analyses of the 2021 Human Development Report.

Frequently Asked Questions

Human Development Index (HDI)

What does the Human Development Index tell us?

The Human Development Index (HDI) was created to emphasize that expanding human choices should be the ultimate criteria for assessing development results. Economic growth is a means to that process but is not an end in itself. The HDI can also be used to question national policy choices, asking how two countries with the same level of Gross National Income (GNI) per capita can end up with different human development outcomes.

For example, Kuwait has GNI per capita more than two times higher than Croatia, but Croatia's life expectancy at birth is three years longer, expecting years of schooling and mean years of schooling are longer one year and four years longer than in Kuwait, respectively, resulting in Croatia having a higher HDI value than Kuwait and being ranked 21 ranks higher. These contrasts can stimulate debate about government policy priorities.

How many countries are included in the 2019 HDI?

The 2019 HDI covers 189 countries. The wide coverage is the result of efforts by the Human Development Report Office (HDRO) to work with UN agencies and the World Bank, which provide internationally standardized data, and with national statistical agencies to obtain required development indicators for the HDI. For a full explanation of the results and methodology of the 2019 HDI and other composite indices, please see Technical Notes 1-6 at http://hdr.undp.org/sites/default/files/hdr2020_technical_notes.pdf

What are the criteria for a country to be included in the HDI?

The Human Development Report Office strives to include as many UN Member States as possible in the HDI. To include a country in the HDI we need recent, reliable and comparable data for all three dimensions

of the Index. For a country to be included, statistics should be available from the national statistical authority through mandated relevant international data agencies.

What is an “imputed” indicator – and for which countries were these imputed statistics used?

For countries for which only one HDI indicator is missing, the HDRO estimates the missing value using an alternative source or a cross-country regression model. For example, mean years of schooling (MYS) for Liechtenstein is based on MYS of neighbouring Austria. For 10 countries— Comoros, Djibouti, Eritrea, Grenada, Lebanon, Madagascar, Micronesia (Federated States), Saint Kitts and Nevis, South Sudan and Syria — mean years of schooling was estimated by a cross-country regression model. Expected years of schooling was estimated by cross-country regression for nine countries—Bahamas, Congo, Equatorial Guinea, Fiji, Gabon, Haiti, Liberia, Libya, and Vanuatu.

Did the HDI rankings change for many countries in 2019?

In general, the rankings change a little between two successive years because of the nature of the HDI component indicators. With the exception of gross national income per capita, other indicators change very slowly year to year.

Based on the consistent data series that were available on the cut-off date for downloading data for the computation of composite indices for the 2019 HDR, there are several countries with ranks that changed between 2018 and 2019. The HDI values for 2018 and 2019 are given in Table 2 of the statistical annex. Table 2 also provides the change in ranks between 2014 and 2019.

The consistent data are based on the latest updates and data revisions and are obtained using the same methodology. The effect of change in achievements (improvement or decline) in human development indicators in terms of health, education and living standards is captured by comparing the HDIs obtained from such a consistent data series.

The difference between HDI values (and ranks) published in different editions of HDR represents a combined effect of data revision, change in methodology, and the real change in achievements in indicators. We advise users of the HDI not to compare the estimates from different editions of Reports, but to always use the consistent data given in Table 2 of the latest report or to use the data series available in the Internet database <http://hdr.undp.org/en/data>.

Were there any significant data revisions of the component indicators for the 2019 HDI?

The major revision was made by the World Bank of GNI and GDP data in PPP terms (World Bank, May 2020.) Data collected in the 2017 International Comparison Program were used for computation of the PPP conversion factors with the new base year set at 2017. Also, the new population data from ‘The World Population Prospect, 2019 Revision’ (United Nations Population Division, June 2019) were used as denominator for computation of indicators expressed per capita and as averages, thus affected GNI per capita and education indicators.

Are the ties in the HDI ranking of countries kept this year?

Although the HDI is calculated with a larger number of decimals, we report only the HDI rounded to three decimals. Often there are ties in the HDI three-decimal values of countries, which is also reflected in ties in their ranks. The HDI values, by the very nature of the estimated components, are not significant beyond three decimal places.

Which data sources are used for HDI computation?

Life expectancy at birth is provided by the UN Population Division in the UN Department of Economic and Social Affairs (UNDESA); mean years of schooling (MYS) is based on UNESCO Institute for Statistics (UIS) educational attainment data, for countries for which UIS data are not available, Barro and Lee (2018) estimates and projections were used; expected years of schooling (EYS) is provided by UIS; and GNI per capita (in 2017 \$PPP) by the World Bank and the International Monetary Fund. For several countries, mean years of schooling and expected years of schooling are estimated from nationally representative household surveys, and for some countries GNI was obtained from the UN Statistical Division's database – National Accounts Main Aggregates Database.

Are there discrepancies between national and international data used for calculation of the HDI and other human development indices?

Differences between national and international values of indicators exist for some countries. HDRO actively advocates for the improvement of the quality of human development data at all levels – national and international - and for an efficient communication and collaboration between national statistical authorities and the UN statistical entities. The Human Development Report Office does not take data directly from national statistical sources.

Why is it important to express GNI per capita in purchasing power parity (PPP) international dollars?

The HDI attempts to make an assessment of 189 diverse countries and territories, with very different price levels. To compare economic statistics across countries, the data must first be converted into a common currency. Unlike market exchange rates, PPP rates of exchange allow this conversion to take account of price differences between countries. In that way GNI per capita (PPP \$) reflects people's living standards comparably across countries. In theory, 1 PPP dollar (or international dollar) has the same purchasing power in the domestic economy of a country as \$1 (USD) has in the US economy. The current PPP conversion rates have been introduced in May 2020. They were based on the 2017 International Comparison Programme (ICP) Surveys, which covered more than 176 economies from all geographical regions and from the OECD.

Can GNI per capita be used to measure human development instead of the HDI?

No. Income is a means to human development, not its end. GNI per capita only reflects average national income. It does not reveal how that income is spent, nor whether it translates to better health, education, and other human development outcomes. In fact, comparing the GNI per capita rankings and the HDI rankings of countries can reveal much about the results of national policy choices. Equatorial Guinea with the GNI per capita of \$13,944 (PPP\$) has a GNI rank of 88, but an HDI rank 145 – almost the same HDI as Zambia whose GNI per capita is only \$3,326 (PPP\$).

Can the HDI alone measure a country's level of human development?

No. The concept of human development is much broader than what can be captured by the HDI, or by any other composite index in the Human Development Report (Inequality-adjusted HDI, Gender development index, Gender Inequality Index or Multidimensional Poverty Index). The composite indices are focused measures of human development, zooming in on a few selected areas. A comprehensive assessment of human development requires analysis of other human development indicators and information presented in the statistical annex of the report (see the Reader's guide to the Report).

Can the HDI indicators be adapted to compute the HDI at the sub-national level?

Yes, the HDI indicators can be adapted to country-specific indicators provided they meet other aspects of statistical quality. For example, some countries have used under-5 mortality rates at sub-national levels instead of life expectancies, and some have used average disposable income per capita instead of GNI per capita. The HDI can also be disaggregated at sub-national level to compare levels and disparities among different subpopulations within a country, provided that appropriate data at the level of disaggregation are available or can be estimated using sound statistical methodology. The highlighting of internal disparities using HDI methodology has prompted constructive policy debates in many countries.

Why is the geometric mean used for the HDI rather than the arithmetic mean?

In 2010, the geometric mean was introduced to compute the HDI. Poor performance in any dimension is directly reflected in the geometric mean. In other words, a low achievement in one dimension is not linearly compensated for by a higher achievement in another dimension. The geometric mean reduces the level of substitutability between dimensions and at the same time ensures that a 1 percent decline in the index of, say, life expectancy has the same impact on the HDI as a 1 percent decline in the education or income index. Thus, as a basis for comparisons of achievements, this method is also more respectful of the intrinsic differences across the dimensions than a simple average.

What is the effect of fixing the maximum of GNI per capita at \$75,000?

Income is instrumental to human development, but the contribution diminishes as incomes rise. Also, a high income without being translated into other human development outcomes is of less relevance for human development. Fixing the maximum at \$75,000 means that for countries with GNI per capita greater than \$75,000, only the first \$75,000 contributes to human development. In this way the higher income is prevented from dominating the HDI value. Currently we have only three countries with GNI per capita above the cap – Liechtenstein, Qatar, and Singapore.

Why is the HDI using the logarithm of income component?

In addition to capping, income enters the HDI as a logarithmically transformed variable. The idea is to emphasize the diminishing marginal utility of transforming income into human capabilities. This means that the concave logarithmic transformation makes clearer the notion that an increase of GNI per capita by \$100 in a country where the average income is only \$500 has a much greater impact on the standard of living than the same \$100 increase in a country where the average income is \$5,000 or \$50,000.

Why has the principle of “diminishing returns” not been applied to other indicators?

There are arguments for and against transforming the health and education variables to account for diminishing returns. It is true that health and education are not only of intrinsic value; they, like income,

are instrumental to other dimensions of human development not included in the HDI (Sen, 1999). Thus, their ability to be converted into other ends may likewise incur diminishing returns. The approach is to value each year of age or education equally, and therefore the principle has been applied only to the income indicator.

What is the rationale behind the minimum values for indicators?

Generally, the minimum values are set to the levels that a society needs to survive over time. For life expectancy – 20 years is based on historical evidence (Maddison, 2010, and Riley, 2005), which indicates 20 years as the minimum. If a society or a subgroup of society has a life expectancy below the typical age of reproduction, that society would die out. Lower values have occurred during some crises, such as the Rwandan genocide, but these were exceptional cases that were not sustainable.

See:

Maddison, A. 2010. *Historical Statistics of World Economy: 1-2008 AD*. Paris: Organization for Economic Cooperation and Development.

Riley, J.C. 2005. *Poverty and Life Expectancy*. Cambridge, UK: Cambridge University Press.
Noorbakhsh (1998). The Human Development Index: Some Technical Issues and Alternative Indices. *Journal of International Development* 10, 589-605.

For both education indicators, the minimum is set to 0 since societies can subsist without formal education. For income, it is set at \$100 per capita GNI, which is lower than the lowest value attained by any country in recent history (Liberia, 1995). Should any country's per capita GNI fall close to or below \$100, the minimum will be changed accordingly.

Are the HDI dimensions weighted equally?

The HDI assigns the same weight to all three dimension indices; the two education sub-indices are also weighted equally. The choice of weights is based on the normative assumption that all human beings value the three dimensions equally. The right choice of minima and maxima for the transformation of component indicators into indices gives more equal ranges of variation of dimension indices. Research papers that provide a statistical justification for this approach include: Noorbakhsh (1998). The Human Development Index: Some Technical Issues and Alternative Indices. *Journal of International Development* 10, 589-605.

Decancq, K. and Lugo, A. (2013). *Weights in multidimensional indices of wellbeing: An overview*. *Econometric Reviews*, 2013 - Taylor & Francis

Why does the HDI not include dimensions of participation, gender and equality?

As a simple summary index, the HDI is designed to reflect average achievements in three basic aspects of human development – leading a long and healthy life, being knowledgeable and enjoying a decent standard of living. Instead of bringing additional dimensions and indicators into the HDI, other composite indices were introduced – Inequality-adjusted HDI, Gender inequality index, and gender development index. Participation and other aspects of well-being are measured using a range of objective and subjective indicators and are regularly discussed in the Reports. Measurement issues related to these

aspects of human development demonstrate the conceptual and methodological challenges that need to be further addressed.

How are the HDI aggregates obtained for country groups?

The aggregation of the HDI across countries in a group (HD category, developing region, etc.) is done by applying the HDI formula to the weighted group-averages of component indicators. The weights used to obtain such averages of component indicators are – total population for life expectancy and gross national income per capita, population (ages 5 to 24) for expected years of schooling and population (ages 25 and above) for mean years of schooling.

Frequently Asked Questions

Inequality-adjusted Human Development Index (IHDI)

What is the purpose of the Inequality-adjusted HDI (IHDI)?

The HDI represents a national average of human development achievements in the three basic dimensions making up the HDI: health, education and income. Like all averages, it conceals disparities in human development across the population within the same country. Two countries with different distributions of achievements can still have the same average HDI value.

The IHDI takes into account not only the average achievements of a country in health, education, and income, but also how those achievements are distributed among its population by “discounting” each dimension’s average value according to its level of inequality.

How is the IHDI computed?

The approach is based on a distribution-sensitive class of composite indices proposed by Foster, Lopez-Calva, and Szekely (2005), which draws on the Atkinson (1970) family of inequality measures. It is computed as the geometric mean of dimension indices adjusted for inequality. The inequality in each dimension is estimated by the Atkinson inequality measure, which is based on the assumption that a society has a certain level of aversion to inequality. For details see [Technical note 2](#).

Does the IHDI show if inequality is getting better or worse?

The IHDI has been calculated for years 2010-2019. By analyzing the trend in the IHDI one can assess the direction of the change. Dashboard 5 on socioeconomic sustainability includes the annual average change in the overall loss due to inequality in HDI distribution across population.

What are the sources of data used for calculating the IHDI?

The IHDI relies on data on income/consumption and years of schooling from major publicly available databases, which contain micro data from national household surveys harmonized to common international standards: Eurostat’s European Union Statistics on Income and Living Conditions, the Luxembourg Income Study, the World Bank’s International Income Distribution Database, the United Nations Children’s Fund’s Multiple Indicators Cluster Survey, ICF Macro’s Demographic and Health Survey, the Socio-economic database for Latin America and the Caribbean (SEDLAC), and the United Nations University’s World Income Inequality Database. Inequality in the health dimension is computed from the abridged life tables from the United Nations Population Division. A list of surveys used for the 2019 IHDI

estimation is given at <http://hdr.undp.org/en/content/table-3-inequality-adjusted-human-development-index-ihdi> .

What is the reference year for the IHDI?

The IHDI refers to 2019. It uses the HDI indicators that refer to 2019 and measures of inequality that are based on the most recent household surveys available from 2008 to 2020 and life tables that refer to the 2015-2020 period. The logic is to use the year to which the HDI indicators refer.

How should the IHDI be interpreted?

While the HDI can be viewed as an index of average achievements in human development dimensions, the IHDI is the level of human development when the distribution of achievements across people in the society is accounted for. The IHDI will be equal to the HDI when there is no inequality but falls below the HDI as inequality rises. The difference between the HDI and IHDI, expressed as a percentage of the HDI, indicates the loss in human development due to inequality.

What does the Coefficient of Human Inequality measure?

The Coefficient of Human Inequality, introduced in the 2014 HDR as an experimental measure, is a simple average of inequalities in health, education, and income. The average is calculated by an unweighted arithmetic mean of estimated inequalities in these dimensions. When all inequalities are of a similar magnitude, the coefficient of human inequality and the overall loss in HDI differ negligibly; when inequalities differ in magnitude, the loss in HDI tends to be higher than the coefficient of human inequality.

What are the limitations of the IHDI?

The IHDI captures the inequality in distribution of the HDI dimensions. However, it is not association sensitive, meaning that it does not account for overlapping inequalities—whether the same people are at the lower end of each distribution. Also, individual values of education and income can be zero or even negative (for income), so they have been adjusted to non-negative non-zero values uniformly across countries. This adjustment can reshape the distributions a bit, so it is fair to say that the Atkinson inequality measure provides an approximation of the magnitude of inequality.

What is the policy relevance of the IHDI?

The IHDI allows a direct link to inequalities in dimensions of the HDI and the resulting loss in human development. Thus, it can help inform policies towards inequality reduction and to evaluate the impact of various policy options aimed at inequality reduction.

Is the IHDI approach useful to UNDP at the country level?

The IHDI and its components can be useful as a guide to help governments better understand the inequalities across population and their contribution to the overall loss in the level of human development due to inequality.

Can the indicators be adapted at the country level?

The IHDI in its current form is inspired by a similar index produced by Mexico's national HDR. The IHDI can be adapted to compare the inequalities in different subpopulations within a country, provided that the appropriate data are available. National teams can use proxy distributions for indicators, which may make more sense in the national context.

Is the IHDI a permanent feature of UNDP's global HDR?

The IHDI was initiated as an experimental index in 2010, alongside the Gender Inequality Index and the Multidimensional Poverty Index. It has been critically examined and discussed at conferences on measuring human progress held in 2012, 2013, 2014 and 2018. It became a regularly computed composite index and it may evolve over time like all other human development indices.

What important properties does this methodology have?

One of the key properties of the approach is that it is 'subgroup consistent'. This means that if inequality declines in one subgroup and remains unchanged in the rest of population, then the overall inequality declines. The second important property is that the IHDI can be obtained by first computing inequality for each dimension and then across dimensions, which further implies that it can be computed by combining data from different sources, thus it is not necessary that micro data on all components come from the same survey.

Is the Gini coefficient not a sufficient measure of inequality? What is the difference between Gini and Atkinson measures of inequality?

The Gini coefficient is commonly used as a measure of inequality of income, consumption, or wealth. There was an attempt to apply the Gini index to measure inequality in the HDI distribution (Hicks, 1998). The choice of the Atkinson inequality measure is guided by three factors: (i) subgroup consistency, (ii) sensitivity to the inequality in the lower end of distribution, and (iii) simplicity of computation and mathematical elegance of the resulting composite Inequality-adjusted Human Development Index.

Subgroup consistency means that if inequality declines in one subgroup (region, ethnic group, etc.) and remains unchanged in the rest of population, then the overall inequality declines. The Gini coefficient does not have this property. By its construction, the Gini coefficient puts equal weights to the entire distribution, while the Atkinson inequality measure puts more weight to the lower end, thus it accounts better for child mortality, illiteracy, and income poverty.

Finally, the geometric form of the HDI in combination with the Atkinson index provides a simple and elegant composite IHDI, obtained by first computing inequality for each dimension and then across dimensions, which further implies that it can be computed by combining data from different sources (life tables and different surveys for education and income).

Does the IHDI capture all inequalities in the HDI dimensions?

No. Due to data limitations and the construction, the IHDI does not capture overlapping inequalities—whether the same person is at the lower end of distributions in all three dimensions. Also, at this time we are not able to estimate inequality in distribution of expected years of schooling, so the inequality in education dimension is assessed only from distribution of years of education for the adult population.

For some countries the assessment of inequality in the income dimension is based on household consumption, and for others it is based on income distribution. Are these inequalities comparable?

By their very nature, income and consumption yield different levels of inequalities, with income inequality being higher than inequality in consumption. Income seems to correspond more naturally to the notion of “command over resources.” Consumption data are arguably more accurate in developing countries, less skewed by high values, and directly reflect the conversion of resources. Income data also pose technical challenges because of the greater presence of zero and negative values. In an ideal world, one would be consistent in the use of either income or consumption data to estimate inequality. However, to obtain sufficient country coverage, it is necessary to use both. The final estimates are modestly influenced by whether inequality refers to income or consumption distribution.

How do you assess inequality in the distribution of life expectancy at birth?

Life expectancy is calculated as the average life span of a hypothetical cohort of 100,000 people born at the same time who progress through successive ages, with the cohort shrinking from one age to the next according to a set of age-specific death rates, until all people in the cohort die. Such an average is the life span that people born in the same year can be expected to live under the constant-mortality assumption, i.e., age-specific mortality is maintained constant throughout the life of the cohort at the level estimated for the reference year of birth or the reference period.

As the cohort shrinks from one age to the next, it implies that people from the cohort are dying at different ages – thus there is an inequality in life spans. We capture this inequality and use it as the inequality measure of the health dimension - in the same way as we use the average of these life spans (i.e., life expectancy) to estimate the average achievement in health dimension.

How is inequality in education calculated?

Inequality in the education dimension is approximated only by inequality in years of schooling of the adult population drawn from nationally representative household surveys. For some countries this inequality is computed from the education attainment tables of the UNESCO Institute for statistics.

Would inclusion of expected years of schooling for children change the results?

Expected years of schooling is an aggregate measure and inequality in its distribution is reflected in current school enrolment ratios. Certainly, there is a difference in inequalities in the two distributions – years of schooling for the adult population and expected years of education for the school age population, with the inequality in distribution of expected years of schooling across the school-age population being lower. Thus, one can speculate that overall inequality in the HDI distribution would be reduced if expected years of schooling were used.

Are the estimated inequalities in distribution of years of schooling for the adult population comparable across countries given the differences in school systems?

Years of schooling of adults is mostly derived from the highest level of schooling achieved. Using UNESCO’s country information on the duration of schooling needed for each level, the highest level of schooling is converted into years. While the duration of primary, secondary and most of post-secondary education is more or less standardized, the very high levels of education—masters and doctoral studies—vary in length

across countries. However, the Atkinson measure of inequality, which is used to assess inequality in the education components, is less sensitive to differences at the upper end of the distribution.

Frequently Asked Questions

Gender Development Index (GDI)

What does the GDI measure?

The GDI measures differences in male and female achievements in three basic dimensions of human development: health, education and command over economic resources. Gender disaggregated data is used in each dimension. The health dimension is captured by female and male life expectancy at birth. Education is measured using two indicators—female and male expected years of schooling for children and female and male mean years of schooling for adults ages 25 and older. Command over economic resources is measured by female and male estimated earned income.

How is the GDI calculated?

The GDI is the ratio of female HDI to male HDI. To calculate it, the HDI is first calculated separately for females and for males. The same goalposts as in the HDI are used for transforming the indicators into a scale lying between zero and one. The only exception is life expectancy at birth where the goalposts are adjusted, to reflect the empirical finding that on average, women have a biological advantage over men, and live about 5 years longer.

How is the income component of the GDI calculated?

The income component, female and male estimated earned income, is calculated based on female and male shares of the population, female and male shares of economically active population, ratio of female to male wages in all sectors, and GNI per capita in PPP\$ (2017 constant prices).

The income component of the GDI is a proxy to command over economic resources. This component captures income gaps in a way similar to the focus on gender gaps in other HDI components.

A number of countries do not have sex-disaggregated wage data. How do you estimate sex-disaggregated GNI per capita for these countries?

The global average female to male wage ratio across all sectors is about 0.8 since 2018. This global average is used to estimate the wage ratio for countries with missing sex-disaggregated wage data. We recognize the limitations in assuming that the global average applies to all countries with missing wage data. The International Labour Organization (ILO) is working to improve availability of sex-disaggregated wage statistics.

What is the advantage of grouping countries into five GDI groups instead of ranking them according to the absolute deviation from parity?

Estimating the female and male HDIs for all countries relies on many approximations, such as assuming wage ratios of 0.8 for many countries. Because of this the estimated HDIs need to be interpreted with caution. We prefer not to rank the countries based on these approximated HDIs. Instead, we group countries into five GDI groups by absolute deviation from gender parity in HDI values.

Group 1 countries have high equality in HDI achievements between women and men: absolute deviation less than 2.5 percent; group 2 has medium-high equality in HDI achievements between women and men: absolute deviation between 2.5 percent and 5 percent; group 3 has medium equality in HDI achievements between women and men: absolute deviation between 5 percent and 7.5 percent; group 4 has medium-low equality in HDI achievements between women and men: absolute deviation between 7.5 percent and 10 percent; and group 5 has low equality in HDI achievements between women and men: absolute deviation from gender parity greater than 10 percent.

What is the policy relevance of the GDI?

The GDI helps in better understanding of the gender gap in human development achievements. It provides insights into gender disparities in achievements in three basic capabilities: health, education and command over economic resources, and is useful for designing and monitoring policies to close the gaps.

Frequently Asked Questions

Gender Inequality Index (GII)

What does the GII measure and how is it calculated?

The GII is an inequality index. It shows the loss in potential human development due to disparity between female and male achievements in three dimensions: reproductive health, empowerment and the labour market. Overall, the GII reflects how women are disadvantaged in these dimensions.

The GII ranges between 0 and 1. Higher GII values indicate higher inequalities between women and men and thus higher loss to human development. There is no country with perfect gender equality. All countries suffer some loss in achievements in key aspects of human development when gender inequality is taken into account. The GII is similar in method to the Inequality-adjusted Human Development Index (IHDI)—see Technical Note 4 http://hdr.undp.org/sites/default/files/hdr2020_technical_notes.pdf for details. It can be interpreted as a combined loss to achievements in reproductive health, empowerment and labour market participation due to gender inequalities. Since the GII includes different dimensions than the HDI, it cannot be interpreted as a loss in HDI itself. For more details, please refer to the discussions in this paper <http://hdr.undp.org/en/content/measuring-key-disparities-human-development> and Technical Note 4 http://hdr.undp.org/sites/default/files/hdr2020_technical_notes.pdf for the current methodology.

What are the strengths and limitations of the GII?

The GII includes reproductive health and measures empowerment beyond the female literacy and primary education. It also reveals gender disparities in labour market participation and avoids using flawed sex-disaggregated income measures.

Like all composite measures, the GII has some limitations. First, it does not capture the length and breadth of gender inequality. For example, it captures national parliamentary representation but excludes participation at the local government level and elsewhere in community and public life. The labour market dimension lacks information on employment and the quality of jobs. The index misses other important dimensions, such as unpaid work, and the fact that many women carry an unfair burden of caregiving and housekeeping. Asset ownership, childcare support, gender-based violence and participation in community decision-making are also not captured in the GII, mainly due to limited data availability.

What are the sources of data used for calculating the GII?

The GII relies on data from major publicly available international databases, including the maternal mortality ratio from World Health Organization (WHO), United Nations Children's Fund (UNICEF), United

Nations Population Fund (UNFPA), World Bank Group and United Nations Population Division; adolescent birth rates from the UN Department of Economic and Social Affairs World Population Prospects; educational attainment statistics from the UNESCO Institute for Statistics educational attainment tables and the Barro-Lee data sets; parliamentary representation from the International Parliamentary Union (IPU); and labour market participation from the International Labour Organization (ILO).

What is the rationale for using indicators for health without equivalents for men?

It is true that reproductive health indicators used in the GII do not have equivalent indicators for males. In this dimension, the reproductive health of girls and women is compared to what should be the societal goals—no maternal death and no adolescent pregnancy. The rationale is that safe motherhood reflects the importance society attaches to women's reproductive role. Early childbearing, as measured by the adolescent birth rate, is associated with greater health risks for mothers and infants; also, adolescent mothers often are forced out of school and into low-skilled jobs.

What do you do in situations where female parliamentary representation is zero?

Only 1 out of 162 countries included in the GII has female shares of parliamentary seats equal to zero. Because the functional form is multiplicative, we replaced the zero value with 0.1 percent to make the computation possible. The rationale is that while women may not be represented in parliament, they do have some political influence. The relative rank of the country is sensitive to the choice of the replacement value. The lowest observed non-zero female shares of parliamentary representation was 1.0% for Yemen.

What is the policy relevance of the GII?

The GII provides insights into gender disparities in reproductive health, empowerment and labour market participation in 162 countries. It can help governments and others understand the extent of gender inequalities in empowerment. The component indicators highlight areas in need of critical policy intervention. The GII, like any other global composite index, is constrained by the need for international comparability. But it could be readily adapted for use at the national or local level.

Frequently Asked Questions

Multidimensional Poverty Index (MPI)

Already updated : <http://hdr.undp.org/en/faq-page/multidimensional-poverty-index-mpi>

Frequently Asked Questions

Human Development Dashboards 1-5

What is a dashboard?

The dashboard approach has become popular for monitoring development outcomes. The 2020 Human Development Report features five colour-coded tables also termed dashboards covering five topics: quality of human development, life-course gender gap, women's empowerment, environmental sustainability and socioeconomic sustainability. The colour-coded tables evaluate progress of human development by highlighting levels and changes of various indicators.

What is the rationale for partial grouping used in dashboards? How different is the partial grouping from the grouping of countries by the Human Development Index?

The dashboards visualize grouping of countries by each indicator, thus partially, contrary to a complete grouping by a composite measure, which combines all listed indicators after making them commensurable. A good example of a complete grouping is the grouping of countries into four human development groups by the Human Development Index (HDI). The complete grouping by a composite index depends on the way the component indicators are combined into the index. On the other hand, the partial grouping does not require any assumption on normalization, weighting or the functional form of the composite index. A partial grouping may depend on the predefined values considered as thresholds needed for grouping, such as what is considered a good performance or as a target to be achieved.

How is the number of groups and colours decided for partial grouping of countries?

The decision was to group countries to a small number of groups, say three, according to the values of an indicator achieved by countries. Countries are divided into three groups of approximately equal sizes (terciles): the top third, the middle third and the bottom third. A distinct shade of a selected colour is attached to a group of countries with a similar level of performance. The colour-coding scale graduates from darkest to lightest.

The darker shade represents the top third group; the moderate shade represents the middle third; and the lightest shade represents the bottom third of countries. Partial grouping of countries applies to all indicators listed in five dashboards. Sex ratio at birth of Dashboard 2 is an exception—countries are divided into two groups: the natural group (countries with a value between 1.04-1.07, inclusive), which uses darker shading, and the gender-biased group (all other countries), which uses lighter shading. See Technical note 6 at http://hdr.undp.org/sites/default/files/hdr2020_technical_notes.pdf for details

What are the observed ranges of values that define tercile groups?

When grouping countries into tercile groups according to each indicator, the intention is not to suggest thresholds or target values for any indicator, but rather to allow a crude assessment of country's performance relative to others. A country that is in the top group performs better than at least two thirds of countries; a country that is in the middle group performs better than at least one third but worse than at least one third; and a country that is in the bottom third performs worse than at least two thirds of countries. The observed ranges of values that define tercile groups for all indicators in dashboards 1-5 are given in Technical note 6 at http://hdr.undp.org/sites/default/files/hdr2020_technical_notes.pdf.

How are the countries grouped according to indicators expressed as female to male ratios?

Countries with values of ratios around 1 form the group with the top achievements in that indicator. Large gaps in favor of men are treated equally as large gaps in favor of women.

Countries are not grouped into tercile groups by all the indicators? Why?

In dashboard 4 on environmental sustainability, countries are not grouped by percentage of total land area under forest, but rather by the change in forest area since 1990. The reason is to respect the fact that the forest area is in a way determined by environmental and climate conditions, while the recent change in forest area is caused by men's activities. Similarly, in dashboard 5 on socioeconomic sustainability, indicator military expenditure (% of GDP) was not used for grouping of countries, instead the ratio of education and health expenditure to military expenditure was used for grouping and coloring. The reason is that military expenditure was not considered as an indicator in this table, but rather as an auxiliary indicator.

How is the colour determined for the aggregates at the bottom of each dashboard?

Group aggregates were not used to define the tercile groups. However, based on the value of an aggregate, it was placed in a tercile group and coloured accordingly.