Annex 1

'Leave no one behind: five years into Agenda 2030'

Emma Samman, José Manuel Roche, Moizza Binat Sarwar and Martin Evans

January 2021

Disclaimer: this Annex contains background data to the above paper. The information has been included in the peer review process but has not undergone extensive editing or formatting.

Contents

This Annex provides more details and context on the analysis in Chapter 3 of *'Leave no one behind': five years into Agenda 2030*. That chapter demonstrates a range of profiling approaches for LNOB focusing on data from three national household surveys from Brazil, Nepal and Nigeria. We also include material that did not feature in the report, but that was part of the analysis.

1. Surveys used in the analysis

Table A1 outlines the surveys used in the analysis, together with a summary of their key strengths and limitations.

Table A1 Surveys used in the analysis of Brazil, Nepal and Nigeria

	Brazil	**Nepal**	**Nigeria**
Survey used in the analysis	National Household Sample Survey PNAD 2002 PNAD 2008 PNAD 2015	Demographic and Health Survey DHS 2006 DHS 2011 DHS 2016	Demographic and Health Survey DHS 2008 DHS 2013 DHS 2018
Monetary (income- or consumption-based) poverty	Available	Not available	Not available
Multidimensional poverty	Time series Global MPI not available*	Time series Global MPI via OPHI**	Time series Global via OPHI**
Nutrition	Not available	Height and weight for children under five and BMI for adults 15–49	Height and weight for children under five and BMI for adults 15–49
Child mortality	Only shorter survey module available (not sufficient to replicate DHS-based estimation)	Yes. Analytical coding files (STATA) available to compute estimation	Yes. Analytical coding files (STATA) available to compute estimation
Education	Children: attendance and level (grade) All: years of schooling	Children: attendance and level (grade) All: years of schooling Adults 15–49: literacy	Children: attendance and level (grade) All: years of schooling Adults 15–49: literacy
Health service provision	Not available	Yes	Yes
Gender	Yes	Yes	Yes
Geographic regions	Five large regions 27 states	Five large regions Three ecological zones 13 regions	Six large regions 37 states
Urban/rural	Yes	Potential comparability problems for 2006	Yes
Ethnicity/race	Yes	Yes 2006 needs recoding	Yes 2008 needs recoding
Household economic ranking	Yes. Quintiles of equivalent Income	Yes. 'Wealth Index' quintile	Yes. 'Wealth Index' quintile
Household monetary welfare distribution (income or consumption)	Yes. Income	Not available	Not available

Mother's level of education	Yes	Yes	Yes

* Brazil's PNAD lacks nutrition data, one of the MPI indicators.
** Oxford Poverty and Human Development Initiative database: https://ophi.org.uk/multidimensional-poverty-index/data-tables-do-files/

2. Indicators and their computation

We next explain the main indicators used in the analysis and provide details of their computation.

Poverty indicators

- SDG Target 1:1 'extreme poverty' according to the international poverty line of $1.90 per person per day in 2015 purchasing power parity (hereafter 'PPP').
- SDG Target 1.2.1 'national poverty line' – expressed in either national inflation-adjusted currency or 2015 PPP. Our analysis uses the World Bank 'Upper Middle Income' poverty line ($5.50 per person per day PPP) for Brazil.
- SDG Target 1.2.1 'national multi-dimensional poverty'. Our analysis uses the OPHI-UNDP Global Multidimensional Poverty Index.

Monetary poverty

We use international poverty lines to ensure consistency across time and countries for national poverty reporting and to avoid marginal differences with national reporting of national poverty line approaches (that may reflect different measurement assumptions and imperfect periodic adjustment of poverty lines to inflation, and changes in national poverty methodology over time).

We employ the following international poverty lines for countries' income categories (based on GNI per capita):

- $1.90 per capita per day PPP for low-income countries
- $3.10 per capita per day PPP for lower middle-income countries
- $5.50 per capita per day PPP for upper middle-income countries

Note that we choose a $5.50 poverty threshold for Brazil to allow consistency over time and to ensure sample sizes of poor people are large enough for most disaggregation and decomposition.

Brazil: we compute per capita disposable household income (after direct taxes and transfers) for each PNAD survey. Household income growth is adjusted by the Consumer Price Index (from World Development Indicators (WDI)) to measure 'real income growth' between surveys adjusted for inflation. All national currency amounts are converted to 2015 PPP using the World Bank WDI deflator. Poverty Indices are reported and discussed according to the Foster-Greer-Thorbecke (FGT) approach:

- Headcount: (headcount ratio) the fraction of the population that lives below the poverty line (the % of population who are poor) – FGT_0

- Poverty gap: the average income (or consumption) of the poor; optimally expressed as the average difference between the poverty line and household income or consumption – FGT_1
- Poverty intensity: captures the inequality of income (or consumption) among the poor, either by considering the coefficient of variation or in summary computation of the squared poverty gap that gives additional weight to the poorest (those furthest from the poverty line)

Multidimensional poverty

National approaches to multi-dimensional poverty vary greatly under Goal 1.2.2 of the SDGs. We use the United Nations Development Programme's (UNDP) and OPHI's 'Global Multidimensional Poverty Index' (MPI) for consistent measures over time and across countries. National-level data for this index in time series can be obtained from the Global MPI databank at the Oxford Poverty and Human Development Initiative (OPHI) (https://ophi.org.uk/multidimensional-poverty-index/data-tables-do-files/), where STATA programmes to replicate poverty profiles are also given.

We do not replicate the formulae for or explain MPI methodology here but refer readers to papers and explanatory materials at https://ophi.org.uk/publications/

MPI poverty indices adopt the FGT approach outlined above.

Under-five child malnutrition (stunting)

SDG indicator 2.1.1. under Target 2.2, SDG2: 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture'.[1]

The exact indicator is 'Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under five years of age'.
Our calculations are based on the methodology recommended in WHO and UNICEF (2019). We use the STATA macro IGROWUP with the most recent update by UNICEF.[2] The package offers analysis for four indicators: length/height-for-age, weight-for-age, weight-for-length and weight-for-height (WHO Multicentre Growth Reference Study Group, 2006; 2007).

Under-five child mortality

SDG indicator 3.2.1. under Target 3.2, SDG3: 'Ensure healthy lives and promote well-being for all at all ages'.[3] Our calculations follow the DHS method on using synthetic cohort probabilities (Rutstein, 2003). We use the Stata module SYNCMRATES, which uses information from birth histories as in the DHS method (Masset, 2016). As a result, we obtain the under-five child

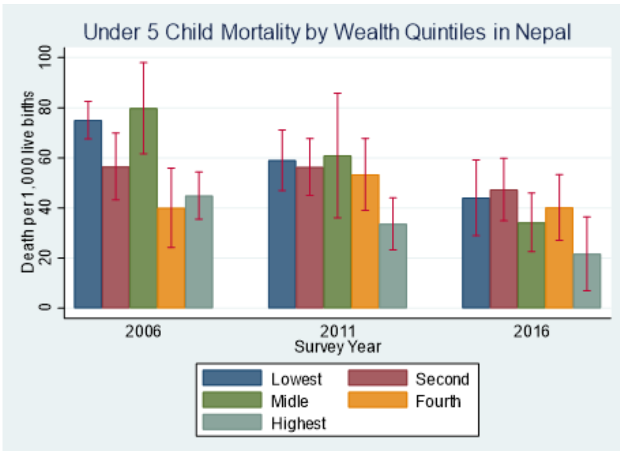
---

[1] Target 2.2 includes targets and indicators on various forms of malnutrition and food insecurity: 'By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round'.
[2] Downloaded in August 2020.
[3] Target 3.2 includes specific targets for Under 5 Child Mortality and Neonatal: 'By 2030, end preventable deaths of newborns and children under five years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-five mortality to at least as low as 25 per 1,000 live births'.

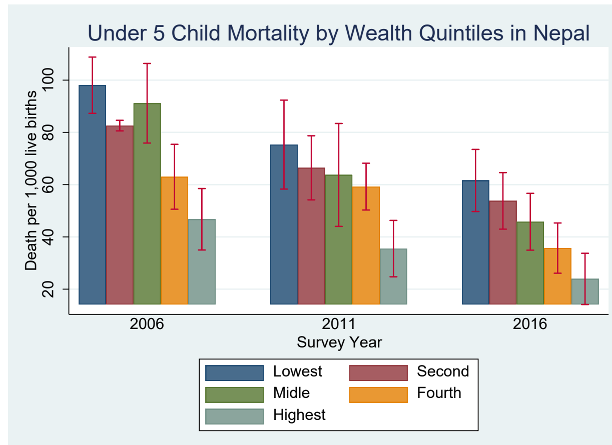
mortality rate and the standard error for each relevant subgroup of population (conventionally expressed as 'deaths per 1,000 live births'). Our estimation corresponds to the overlapping moving average 10 years before the survey.[4]

Figure A1 Under-five child mortality by wealth quintiles in Nepal

Based on five years



Based on 10 years



Education

Unlike nutrition and mortality, we are unable to measure the official SDG indicators for education. The education module in the DHS and PNAD is limited compared to surveys or other instruments dedicated exclusively to education. We opt for proxy measures that permit disaggregation across social and economic groups while reflecting the spirit of the education goal and its component indicators. SDG Goal 4 aims to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. We aim for proxy indicators for the following targets and indicators:

- **Target 4.1.** 'By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.
- **Indicator 4.1.1.** 'Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex'. The final indicator is then 'Proportion of children and young people achieving a minimum proficiency level in reading and mathematics (%)'.[5]
- **Indicator 4.1.2**. 'Completion rate (primary education, lower secondary education, upper secondary education)'. Note that the SDG framework suggests disaggregating completion rate by sex, location, wealth quintile and education level (%).

[4] This can be adjusted to five years instead or any other range. Indeed, there may be good reasons to use five years since the gap between surveys is on average around five years. However, we have more information by increasing the years, and so the estimate is more precise. See illustration comparing using five or 10 years and note how: 1) standard errors are smaller 2) ordering and gaps are more intuitive with 10 years.

[5] See metadata in: https://unstats.un.org/sdgs/metadata/files/Metadata-04-01-01BC.pdf

- **Target 4.5.** ‘By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations’.
- **Indicator 4.5.1.** ‘Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous and conflict-affected, as data becomes available) for all education indicators on this list that can be disaggregated’.
- **Target 4.6.** ‘By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy’.
- **Indicator 4.6.1.** ‘Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex’.

Final indicators on education

Complete quality primary and secondary education. The percentage of school completion measures the share of individuals from a given age cohort who have completed a given level of educational attainment (e.g. primary, lower secondary, upper secondary). Since we intend to register changes attributed to the period between both surveys, we restrict the indicator to the cohort of population who were at age to complete primary in the period just between the two surveys. For this we consider the length of the education level in each education system and the starting age for primary education as reported by the UNESCO Institute for Statistics: https://data.worldbank.org/indicator/SE.PRM.AGES

Complete quality primary and secondary education (adjusted by quality). The level of attainment in itself is an insufficient marker of learning outcomes; even where levels of completion are high, the quality of education may fall (dismally) short. Because the DHS is not focused on education, it collects limited information on its quality; however, researchers have devised innovative ways of using the data it collects on literacy as a measure of learning outcomes (Sandefur and Pritchett, 2017). We apply their method to construct an individual gauge of quality-adjusted primary school completion whereby a person is judged to have completed primary education if they attended X years of schooling, and if they are judged to be literate.[6]

Years of education. We use this indicator to measure disparities in access and school attainment. This indicator is not on the official SDG list, but it is an apt measure of inequality among social and economic groups. In our analysis, we follow the UNESCO definition,[7] and restrict the age cohort to 20–49 to enable evaluation of changes over time. Learning metrics from SDG indicator 4.1.1. could equally be used once this data becomes more widely available, provided it can be disaggregated for social and economic groups.

---

[6] It is a strong assumption that any secondary school attendance is equivalent to complete literacy so information is less useful at higher levels of education.

[7] See http://uis.unesco.org/sites/default/files/documents/uis-methodology-for-estimation-of-mean-years-of-schooling-2013-en_0.pdf

3. Approaches to measuring group-based inequality

We next outline approaches to measuring group-based inequality, highlighting key strengths and limitations, relevant metrics to assess disparity and whether the further behind group is closing the gap.

Absolute gap. This is the crudest measure. It is simply the absolute difference between the group outcome and the national average outcome.

$$Abs\ gap\ x_g = x_g - \bar{x}$$

Relative gap. In this measure the ratio is then expressed as a relative gap with respect to the national average outcome. In other words, it is a proportion with respect to the national mean.

$$Relative\ gap\ x_g = \left(x_g - \bar{x}\ \right)/\bar{x}$$

Ratio. The gap is expressed here as a ratio with respect to the national average outcome. This is a more intuitive metric that shows how more or less likely the group is to experience an outcome with respect to the national average.

$$Ratio\ x_g = x_g/\bar{x}$$

Concentration curve. A complete picture of the distribution among those below the deprivation threshold can be obtained by using a concentration curve. The concentration curve displays the share of the health outcome by cumulative proportion of individuals in the population ranked from poorest to richest. We compute the Lorenz concentration curve following method and dofiles from O'Donnell et al. (2008). In the analysis for malnutrition, we look at the distribution of malnourished children by asset index score (as a proxy to level of income).

Concentration index. The concentration index is defined with reference to the concentration curve. The concentration index is defined as twice the area between the concentration curve and the line of equality: see
http://pubdocs.worldbank.org/en/737711503325812648/HealthEquityCh8.pdf and
https://countdown2030.org/documents/Country_workshops/concentration_index.pdf

Other measures of group-based inequality identified by Stewart et al. (2010) as 'most appropriate' given their properties:

GCOV Group coefficient of variation among groups. The variance divided by the mean. This is a straightforward descriptive metric, with minor implicit evaluation. When adapted to measure group inequality, we opt to weight it by the size of the population in each group to avoid very small groups having a disproportionate effect.[8] As with many other measures, the GCOV is independent from the distribution of the mean. It attaches equal weight to redistribution at different levels.[9] The COV involves squaring the deviations from the mean, thus giving more weight to the extremes.[10] In contrast to some other measures, this only measures differences from the mean, not every difference with every group.

$$\boldsymbol{Unweighted\ GCOV} = \frac{1}{\bar{x}}\left(\frac{1}{R-1}\sum_{r}^{R}(\bar{x}_r - \bar{x})^2\right)^{1/2}$$

$$\boldsymbol{Weighted\ GCOV} = \frac{1}{\bar{x}}\left(\sum_{r}^{R} p_r\,(\bar{x}_r - \bar{x})^2\right)^{1/2}$$

GGINI **Group Gini.** Groups are defined according to a group characteristic, in our case wealth quintile, geographical region and ethnic group. This has the advantage, compared to GCOV, that it compares every group with every other and does not square differences. When applied to vertical inequality, an advantage of this metric that it is decomposable in ‘between group inequality’ and ‘within group inequality’. However, when measuring horizontal inequality, we are less interested in measuring the contribution of group inequality to welfare as a whole, but to measure the extent of group inequality (Stewart et al., 2010).[11]

$$\boldsymbol{GGINI} = \frac{1}{2\bar{x}}\sum_{r}^{R}\sum_{s}^{S} P_r P_s(\bar{x}_r - \bar{x}_s)$$

GTHEIL **Group Theil.** Groups are defined according to a group characteristic, in our case wealth quintile, geographical region and ethnic group. This metric is especially sensitive to the lower end of the distribution, or changes in the ranking in those who are ‘furthest behind’. An advantage for vertical inequality is that Theil is precisely decomposable, but as with GINI we are not interested in this element when measuring horizontal inequality.

---

[8] Stewart et al. (2010) highlight the impact that small group may have if the GCOV is unweighted.

[9] Note that this means the metric does not fully satisfy the principle of transfers (Pigou-Dalton), in particular that ‘the transfer from an equal amount from a richer to poor counts for more than one from rich to less rich’. Stewart et al. (2010) explain this is an advantage when it comes to measure group inequality because it provides a descriptive, not evaluative measure.

[10] Sen (1997: 28) has questioned this procedure as being somewhat arbitrary.

[11] ‘[ ] groups qua groups have no special significance in the normative calculus. But if individual identity flows in part from group membership this may help to explain why it is the ratio of the mean incomes of two racial groups that has socio-political salience, rather than the (low) proportion of overall interpersonal inequality accounted for by the between race term in a standard inequality decomposition’ Kanbur (2003: 5) cited by Stewart et al. (2010).

$$GTHEIL = \sum_{r}^{R} p_r \frac{\bar{x}_r}{\bar{\bar{x}}} log\left(\frac{\bar{x}_r}{\bar{\bar{x}}}\right)$$

Where $\bar{x}$ is the sample mean, $\bar{x}_r = \frac{1}{n_r}\sum_i^{n_r} x_{ir}$ is group mean value, p_r is group r population share, $x_{ir}$is outcome of i^{th} member of group r, and X is the sum of the outcome for the whole sample.

Annual average absolute rate of change. Alternative when variable is not cardinal.
Annual average Reduction Rate. Alternative when variable is not cardinal.

With the above we'll be looking at convergence vs. divergence

$$\mathrm{CAGR} = \left(\frac{V_{\mathrm{final}}}{V_{\mathrm{begin}}}\right)^{1/t} - 1$$

CAGR = compound annual growth rate
V_{begin} = beginning value
V_{final} = final value
t = time in years

4. Dominance tests for stunting

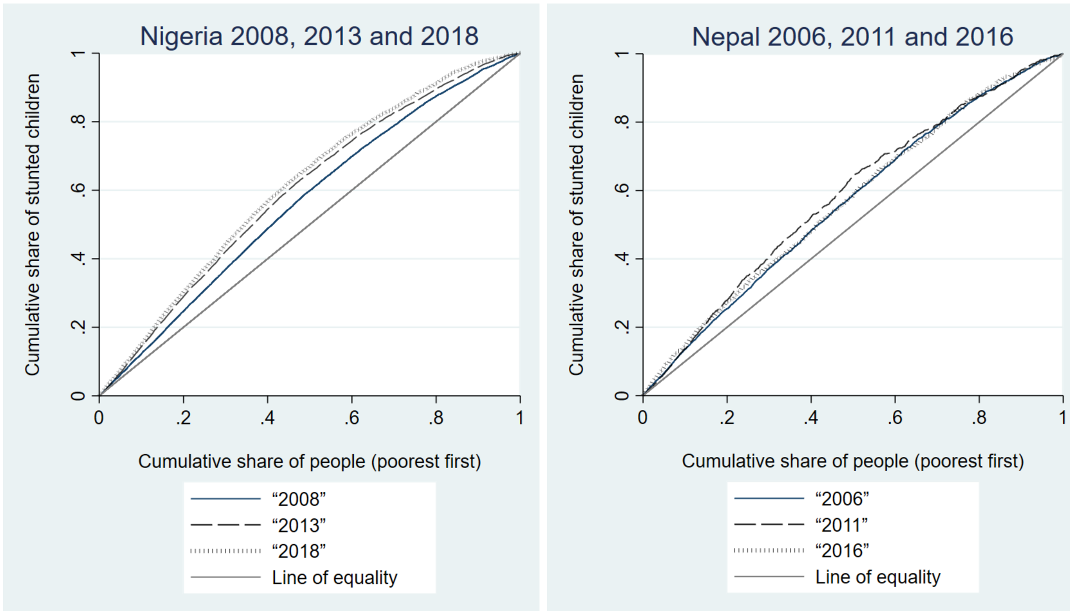
As part of our analysis on inequality in stunting, we ran a series of dominance tests exploring the full distribution as well as the distribution among only children below the threshold. Next are the results and findings.

Nigeria: 2008 had the least unequal distribution. Inequality rose between 2008 and 2013, with statistically significant dominance.[12] Inequality appears to rise again between 2013 and 2018, but dominance is not statistically significant. The net effect is a clear increase in inequality between 2008 and 2018.

Nepal: in comparison with Nigeria, Nepal has a slightly lower level of inequality in child malnutrition. There seems to be a slight increase in inequality between 2006 and 2011, and then a slight decrease in 2016.[13] However, a test of concentration curve dominance indicates no statistical significance. In other words, observed changes are within the margin of error.

[12] In all cases we checked for statistical significance at 5% significant level. All results are reported.
[13] Note the graph indicates that 2011 and 2016 curves cross in the lower part of the distribution indicating that concentration of malnutrition among better off children may have decreased in relation to concentration at the

Figure A2 Dominance tests for stunting in Nigeria and Nepal



The bar chart below shows also represents changes in Nepal's distribution but using a different visualisation tool.

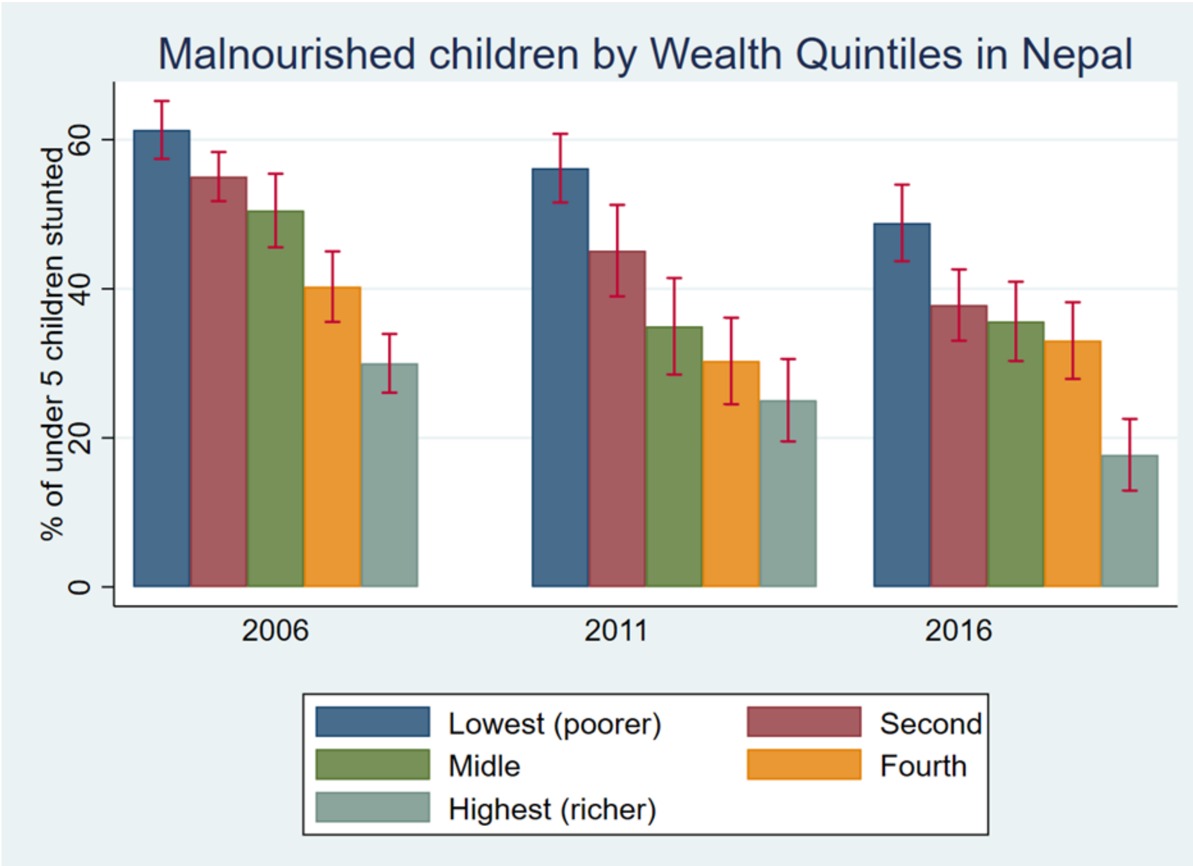
2006/2011: during this period, the second, middle and fourth quintile improved the fastest, catching up with the richer quintile. Differences between highest, fourth and second were statistically significant in 2006, but confidence intervals overlap in 2011. Evidence also shows that the poorest quintile experienced slower progress during this period. The result indicates a net increase in inequality as shown by the analysis of the concentration curves, even if they appear to be non-statistically significant.

2011/2016: the concentration curve showed that the distribution became more equal, but the curves crossed, and dominance was non-statistically significant. The reason is that we saw improvements among the bottom and top of the distribution, but non-statistically significant progress in the middle and fourth quintile. Malnutrition in some of these quintiles appears to have increased. Evidence shows a reduction in the malnutrition level among the poorest segments of society and among the richer quintiles. Inequality remains nearly invariant.

---

bottom of the distribution. In other words, there is increasingly less malnutrition among the rich quintiles in relation to bottom quintiles. Differences are small and non-statistically significant requiring further checks.

Figure A3 Malnourished children by wealth quintiles in Nepal



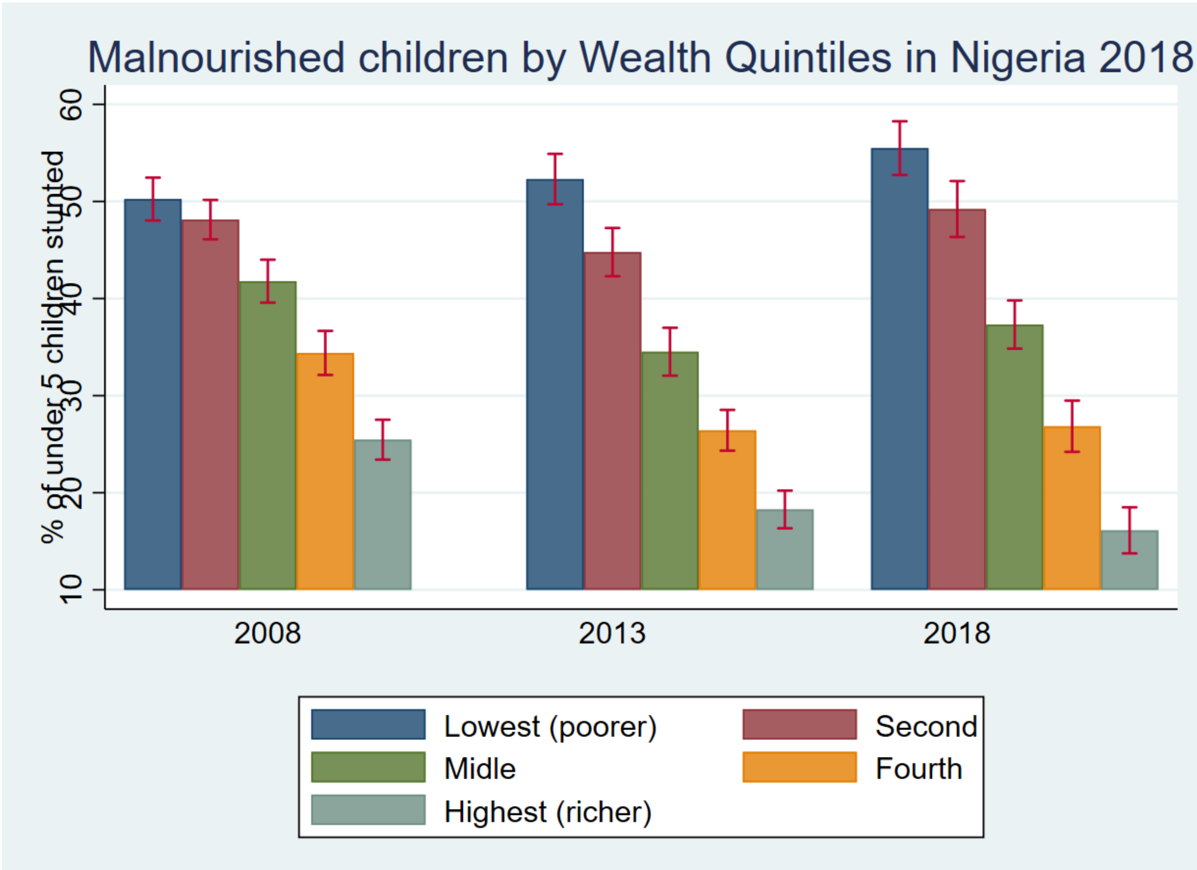
The bar chart below shows also represents changes in Nigeria's distribution but using a different visualisation tool.

2008/2013: the concentration curve indicates that inequality increased between 2008 and 2013. The evidence in the graph below confirms this finding. Malnutrition in the poor quintile showed non-statistically significant change, while richer groups experienced a reduction in malnutrition.

2013/2018: the gap widens even further between 2013 and 2018. During this period, malnutrition slightly increased for the poorer and second quintile (low statistical significance), while it remained unchanged in all other quintiles. This finding confirms the analysis with the concentration curves.

The bottom line is that inequality unequivocally increased in Nigeria, leaving the poorest segments of society behind (the bottom 40%). In Nepal, in contrast, all groups improved, while inequality appeared to be unchanged.

Figure A4 Malnourished children by wealth quintiles in Nigeria



5. Theil decomposition

Along with the Gini index, the Theil index is one of the generalised entropy measures used to assess inequality. The Theil index has the valuable property of being decomposable. Figure 18 in the main report summarises various decomposition models. This section explains the methodology and presents the results in detail.

Our Theil decomposition models incorporate a group characteristic one at a time, then assess the joint effect by combining some characteristics at the same time. Our aim is to measure how much of the overall inequality is explained by inequality within a particular group, or in combination with other groups. For example, a Theil decomposition in 2002 including only urban/rural, only poor/non-poor or only race shows that between-group inequality explained 5.3%, 4.3% and 2.6% of total inequality, respectively. If we combine all three factors jointly, we find that 17.4% is due to between-group inequality. Note that it is greater than the addition of the individual analysis for various reasons. The first reason is arithmetic: having a larger number of groups leads to an increase in the percentage explained by the model. Second, the combination of factors creates groups that are more homogenous internally and more heterogenous among themselves.

Table A2 Theil decomposition by subgroups

	2002	2008	2015	2002	2008	2015
Poor						
Theil	0.146	0.127	0.104	100%	100%	100%
Within group	0.128	0.117	0.100	96%	92%	96%
Between groups	0.018	0.010	0.005	4.3%	8.2%	4.3%
Quintiles						
Theil	0.146	0.127	0.104	100%	100%	100%
Within group	0.121	0.111	0.095	83%	87%	92%
Between groups	0.026	0.016	0.009	17%	13%	8%
B40						
Theil	0.146	0.127	0.104	100%	100%	100%
Within group	0.129	0.116	0.099	88%	91%	95%
Between groups	0.017	0.011	0.005	11.6%	8.6%	5.2%
Region						
Theil	0.146	0.127	0.104	100%	100%	100%
Within group	0.143	0.126	0.103	98%	99%	99%
Between groups	0.003	0.002	0.001	2%	1%	1%
Urban						
Theil	0.146	0.127	0.104	100%	100%	100%
Within group	0.138	0.122	0.100	95%	96%	96%
Between groups	0.008	0.006	0.004	5.3%	4.4%	3.8%
Race						
Theil	0.146	0.127	0.104	100%	100%	100%
Within group	0.142	0.125	0.103	97%	98%	99%
Between groups	0.004	0.002	0.001	2.6%	2%	1%
Gender						
Theil	0.146	0.127	0.104	100%	100%	100%
Within group	0.146	0.127	0.104	100%	100%	100%
Between groups	0.000	0.000	0.000	0%	0%	0%
Urban+poor+race						

Theil	0.176	0.157	0.137	100%	100%	100%
Within group	0.146	0.137	0.124	83%	87%	90%
Between groups	0.031	0.021	0.013	17%	13%	10%
Region+urban+poor+race						
Theil	0.176	0.157	0.137	100%	100%	100%
Within group	0.145	0.136	0.123	82%	87%	90%
Between groups	0.031	0.021	0.014	18%	13%	10%
Urban+quintile+race						
Theil	0.176	0.157	0.137	100%	100%	100%
Within group	0.133	0.126	0.114	76%	80%	83%
Between groups	0.043	0.032	0.023	24%	20%	17%
Region+urban+race+gender						
Theil	0.176	0.158	0.137	100%	100%	100%
Within group	0.160	0.145	0.127	91%	92%	93%
Between groups	0.016	0.012	0.009	9%	8%	7%

6. Detailed Blinder-Oaxaca Decomposition results

We use regression-based decomposition to help understand the drivers of difference in a cross-sectional profile of group-based inequality. Using such an approach, we can additionally control for and understand the cross-cutting influence of vertical inequalities and other contextual drivers of difference between groups. The Blinder-Oaxaca approach to decomposition is of long standing and is well understood by analysts and economists. Other more recent approaches to decomposition, such as those based on quantile regression, can give different and improved understanding in many instances, but we use Oaxaca-Blinder as the ‘industry standard’ that can be appreciated most easily at national level and reflects the available expertise and experience of economists and other analysts.

We use two models, applied to data on years of education for Brazil. Model 1 decomposes inequality to estimate the drivers of difference at each point in time: 2002, 2008 and 2015. Model 2 decomposes the trend changes from 2002 to 2015. In the report we present the results for Model 2 over the whole period. Below we present Model 1.

Model specification

We use the decomposition to consider the drivers of inequality in years of completed school education. We measure years of schooling using a cap on secondary schooling (11 years) and we only use the age group of those aged 20 or older. Given the large cohort of those older people who will remain more or less constant over the three years, we control for the population aged over 50.

Table A3 Cross sectional Blinder-Oaxaca Decomposition

	Cross sectional (difference in years of schooling)		
	2002	**2008**	**2015**
Mean years schooling			
Non-poor	7.4	7.7	8.0
Poor	4.6	5.5	6.4
Difference	2.8	2.3	1.6
Decomposition			
Explained	0.300	0.166	0.044
% explained	11%	7%	3%
Unexplained	2.534	2.094	1.539
Group characteristics			
Female	0.00	0.01	0.02
Rural	–0.18	-0.19	–0.19
Centre-West	0.01	0.02	0.04
North-East	–0.28	-0.29	–0.29
North	–0.03	-0.05	–0.07
South East	0.22	0.23	0.22
White and Amarelo	0.28	0.25	0.24
Black or Mixed-Race	–0.28	–0.25	–0.23
Over 50 years old	0.10	0.14	0.20
Coefficient			
Female	0.25	0.25	–0.32
Rural	–1.15	–0.89	0.53
Centre-West	0.36	–0.10	0.21
North-East	0.73	0.14	0.02
North	0.22	0.14	0.15
South East	0.24	0.10	0.12
White and Amarelo	0.60	0.29	–0.53
Black or Mixed-Race	–0.09	–0.29	–0.14
Over 50 years old	–0.59	–0.42	0.18

Figure A5 Blinder-Oaxaca Decomposition results