

SOCIAL AND ECONOMIC POLICY WORKING BRIEFS

FEBRUARY 2011
UNICEF POLICY AND PRACTICE

A Multidimensional Approach to Measuring Child Poverty

- Child poverty differs from adult poverty in that it has different causes and effects, and the impact of poverty during childhood can have detrimental effects on children which are irreversible.
- A multi-country analysis demonstrates that income/consumption poverty measures can mask the severity and disparities in child poverty, whereas child-specific social indicators can capture the multidimensional and interrelated nature of poverty.
- Countries that implement holistic policies that address the multidimensionality of child poverty are likely to be more successful in advancing children's rights with equity.

There is a growing consensus that children experience poverty in ways that are different from adults; and looking at child poverty through an income-consumption lens only is inadequate. The 2005 State of the World's Children presented the following definition of child poverty: "Children living in poverty experience deprivation of the material, spiritual and emotional resources needed to survive, develop and thrive, leaving them unable to enjoy their rights, achieve their full potential or participate as full and equal members of society". Using evidence from UNICEF's ongoing Global Study on Child Poverty in Disparities, this Brief illustrates the importance of looking beyond traditional methods of measuring poverty based on income or consumption levels, and emphasizes the importance of seeking out the multidimensional face of child poverty. This approach further recognizes that the method used in depicting child poverty is crucial to the policy design and implementation of interventions that address children's needs, especially among the most deprived.

A MULTIDIMENSIONAL APPROACH

Growing up in poverty can be damaging to children's physical, emotional and spiritual development. However, child poverty is rarely differentiated from poverty in general and its special dimensions are seldom recognized. Child poverty differs from adult poverty in that it has different causes and effects, and the impact of poverty during childhood can have detrimental effects on children which are irreversible. Poverty impacts more acutely on children than on adults because of their vulnerability due to age and dependency. Poverty in childhood can cause lifelong cognitive and physical impairment, where children become permanently disadvantaged and this in turn perpetuates the cycle of poverty across generations. Investing in children is therefore critical for achieving equitable and sustainable human development.

The most commonly used method to measure poverty is based on income or consumption levels: which means that a person is considered poor if his/her consumption or income level falls below some minimum deemed level necessary to meet his/her basic needs. While such measures offer a broad understanding of

populations living in poverty they provide a limited picture of child poverty and the actual deprivations children may face. In addition, they do not capture the disparities that may remain within countries; corrections for inequality are rarely made in monetary measures of poverty. For these purposes various social indicators often provide a more accurate picture of poverty. These indicators can capture the multidimensional and interrelated nature of poverty as experienced by children themselves, for example that malnutrition can affect health and education which in turn may impact a child's long term development. UNICEF has long recognized the importance of adopting a multidimensional approach to measuring child poverty; in 2003 UNICEF supported University of Bristol, UK in the development of a multidimensional child poverty measure. Multidimensional poverty measures gained increased attention in the past year with the release of the Multidimensional Poverty Index, developed by Oxford's Poverty & Human Development Initiative, that was featured in the 2010 Human Development Report (read more about the MPI: <http://hdr.undp.org/en/statistics/mpi/> and the debate around the Index: www.oxfamblogs.org/fp2p/?p=3092).

UNICEF's Global Study on Child Poverty and Disparities, launched in 2007, and based on decentralised research and analysis in more than 50 countries looks at the linkages between child deprivations in eight critical dimensions; these are education, health, nutrition, water, sanitation, shelter, information and income/consumption. In addition to reporting on income poverty, this Brief uses a methodology developed by University of Bristol, UK (Gordon et al.), which considers those who suffer from two or more deprivations as poor, and where each dimension is defined by thresholds – capturing moderate as well as severe deprivations. For example, the nutrition threshold for moderate deprivation includes “Children who are more than two standard deviations below the

international reference population for stunting, wasting or underweight,” and the nutrition threshold for severe deprivation are “Children who are more than three standard deviations below the international reference population for stunting, wasting or underweight” (see *Global Study Guide* and *Child Poverty in the Developing World* (Gordon et al.) for a complete list of these definitions). This Brief focuses on severe deprivations, as defining indicators in such severe terms leaves no doubt that living conditions are unacceptable.

The Global Study country analyses mostly use data from the Multiple Indicator Cluster Surveys and Demographic and Health Surveys, most commonly from 2005/6. In addition to the quantitative analysis, a number of countries have undertaken qualitative analyses to enhance their analyses of how poverty affects children in physical, emotional and social ways. Examples of these analyses are also included in this Brief.

In 2005 the total number of children in the developing world was estimated to be 1.9 billion. This Brief draws upon data from 36 countries from seven regions, of the 52 countries that are participating in the Global Study, representing altogether coverage of 1.45 million children. The Brief focuses on multiple severe deprivations of children's basic needs in the 36 countries; and while it shows some aggregate figures for illustration, these should not be considered as regional or global estimates.

THE CHILD DEPRIVATION MEASURE AND THE INCOME MEASURE

Out of the 1.45 million children included in this analysis representing 36 countries:

- 51 per cent experience at least two or more moderate deprivations of basic needs: 731,957 children
- 38 per cent experience at least two or more severe deprivations of basic needs: 553,049 children

(Source: UNICEF Global Study on Child Poverty database).

When measuring income poverty, the most commonly used indicator is \$1.25 a day, where someone is considered poor if his or her income level falls below that level. In the graph on the right, the blue and green bars represent the percentage of children in each country that experience moderate and severe deprivations respectively, while the orange line represents the percentage of people in each country who are income poor according to the \$1.25 a day poverty line (while recognizing that for some countries the data for income poverty and multidimensional child poverty are from different years). In general the multidimensional child poverty measure conforms with the income measure, however there are also large differences; for example while 66 per cent of the population in Niger is considered income poor, 88 per cent of children experience two or more moderate deprivations and 84 per cent of children experience two or more severe deprivations. The reverse is evident in Philippines, where 23 per cent of the population is income poor while 15 per cent of children experience two or more moderate deprivations and only 2 per cent of children experience two or more severe deprivations National level analyses enriches one's understanding of the underlying reasons for these disparate poverty measure outcomes. This would include, for example, identifying who reaps the benefits of economic growth, tracking social sector investments, assessing the effectiveness of service delivery, analyzing employment trends etc. This graph accentuates the importance of looking at both measures for policy purposes, as they can produce vastly different outcomes.

A commonly used indicator of wealth is the per capita Gross Domestic Product (GDP) of a country. When looking at Uzbekistan, Vietnam, and India, which all have a GDP per capita in

Figure 1. Multidimensional Child Poverty and Income Poverty: A Country Comparison

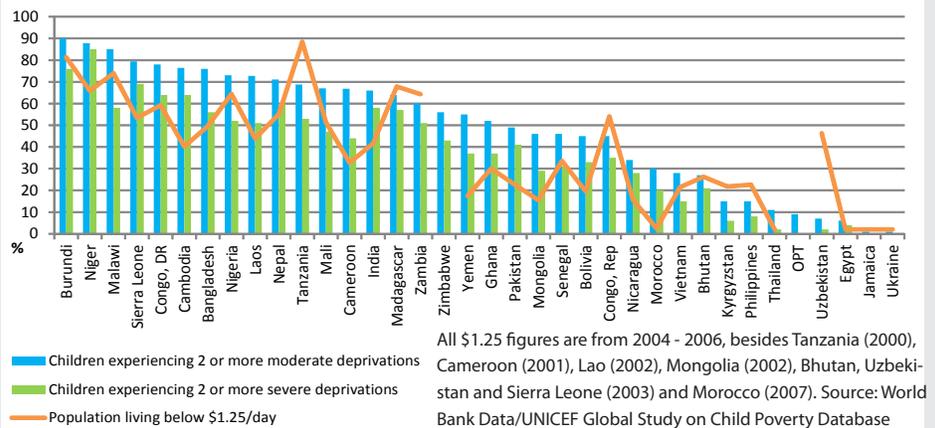
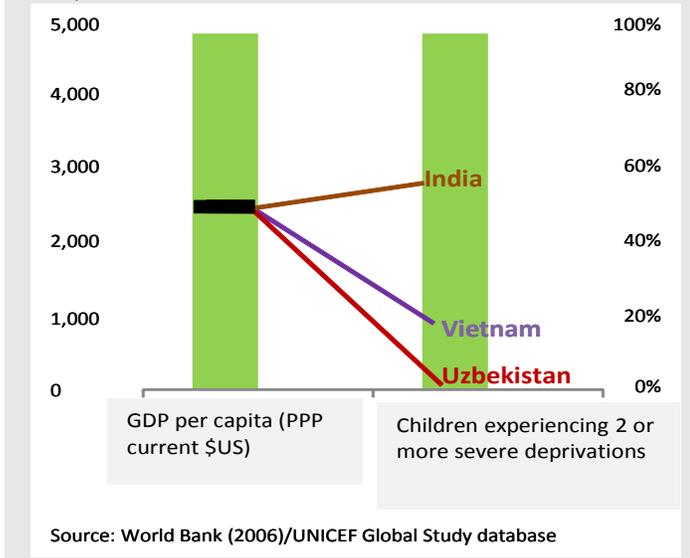


Figure 2. Multidimensionality: Comparing GDP per capita and Child Poverty Headcounts



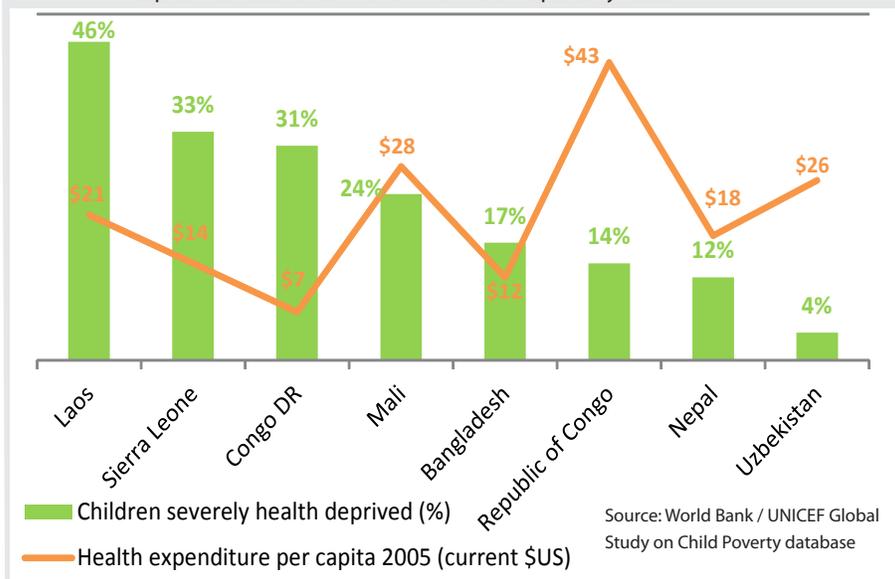
a similar range from US\$ 2,190 – 2,573 (Source: World Bank 2006), one finds very different levels of child poverty. In Uzbekistan, Viet Nam, and India, 2 per cent, 15 per cent, and 58 per cent of children experience two or more severe deprivations, respectively, and hence are considered poor. These differences emphasize the importance of looking beyond GDP and other such economic measures of poverty. Although these measures are important, they alone do not adequately capture the deprivations children face.

A comparable analysis focusing on eight countries whose population living below the international

Table 1. Child health deprivations and health expenditure

	Population living below \$1.25/day	Children experiencing 2 or more severe deprivations	Children severely health deprived	Health expenditure per capita 2005 (current \$US)
Laos	44%	51%	46%	US\$ 21
Uzbekistan	46%	2%	4%	US\$ 26
Bangladesh	50%	56%	17%	US\$ 12
Mali	51%	47%	24%	US\$ 28
Sierra Leone	53%	69%	33%	US\$ 14
Republic of Congo	54%	35%	14%	US\$ 43
Nepal	55%	60%	12%	US\$ 18
Democratic Republic of Congo	59%	64%	31%	US\$ 7

Figure 3. Children severely health deprived and health expenditure per capita - for countries with similar income poverty rates



poverty line of \$1.25 lies within a 15 per cent range from 44 per cent to 59 per cent, illustrates diverse child poverty headcounts. A preliminary analysis, looking at the percentage of children severely health deprived (those who did not receive immunizations against any diseases or who did not receive treatment for a recent illness involving an acute respiratory infection or diarrhoea) and health expenditures per capita (World Bank, World Development Indicators) illustrate a general tendency for countries with higher investments in health to have a lower percentage of children who experience severe

health deprivations. However, there are exceptions; for example, in Nepal per capita health expenditure is \$18, which is comparable to the \$21 per capita health expenditure in Laos, however, severe health deprivations are 12 per cent in Nepal, while in Laos it is as high as 46 per cent of children. Hence, it is critical to not only understand per capita expenditure figures, but to also assess how the dollars are spent.

Additionally, we have not taken into account the vastly different health challenges a child living in Congo DR, for example, may be facing with a higher disease burden compared to a child living in for example Uzbekistan where less resources may be required to tackle child health challenges.

However, differences in disease burdens alone cannot explain the significant differences in health indicators for two neighboring countries, the Democratic Republic of Congo (DRC) and the Republic of Congo, where vastly different deprivation figures emerge. Some 31 per cent of children in DRC and 14 per cent of children in the Republic of Congo (a figure similar to countries such as Nepal, Morocco and Nicaragua from the 36 country sample) experience severe health deprivations.

These figures may reflect the weight given to child health related services; for example, in the Republic of Congo health expenditure per capita in 2005 was \$43, as opposed to \$7 in DRC. It is also important to recognize that these are two vastly different countries; the Republic of Congo is classified as a lower middle income country while DRC is a low income country that has been afflicted by a long and brutal conflict. It is therefore essential to work towards a holistic understanding of the underlying reasons why certain child outcomes may emerge – using a multidimensional approach along with a comprehensive picture of the policy, socio-economic and institutional

frameworks – which will enable the identification of the most effective and relevant policy responses needed to address these outcomes.

NATIONAL AVERAGES: INEQUITIES CONCEALED

The analysis has thus far focused on national averages for the 36 countries in the sample. For certain middle-income countries, the deprivation approach to child poverty defined by severe thresholds, may not be adequate. For example, in Egypt 4 per cent of children experience two or more severe deprivations and in Thailand 2 per cent of children experience two or more severe deprivations.

However, when undertaking analysis at the sub national level, a number of disparities emerge. In Egypt, poverty among children is highly concentrated in rural areas, and in particular in the rural area of Upper Egypt (UE) where 10 per cent of the children experience two or more severe deprivations and 40 per cent of children are shelter deprived, while only 1 per cent of children in urban Lower Egypt (LE) are shelter deprived.

Similarly in Thailand, great disparities are revealed when looking at severe deprivations by wealth quintiles and by ethnicity. While only 2 per cent of children experience 2 or more severe deprivations on average, 23 per cent of children from the Hill tribe are poor and 0 per cent of children from Laos and Chinese ethnicity are considered poor. Likewise, 5 per cent of the children from the poorest quintile experience 2 or more severe deprivations, while none of the children from the richest quintiles experience severe deprivations. These numbers illustrate an important message; one needs to look beyond national averages to address intra-country inequities in order to reach the most deprived families.

Figure 4. Egypt: Children severely deprived - by region

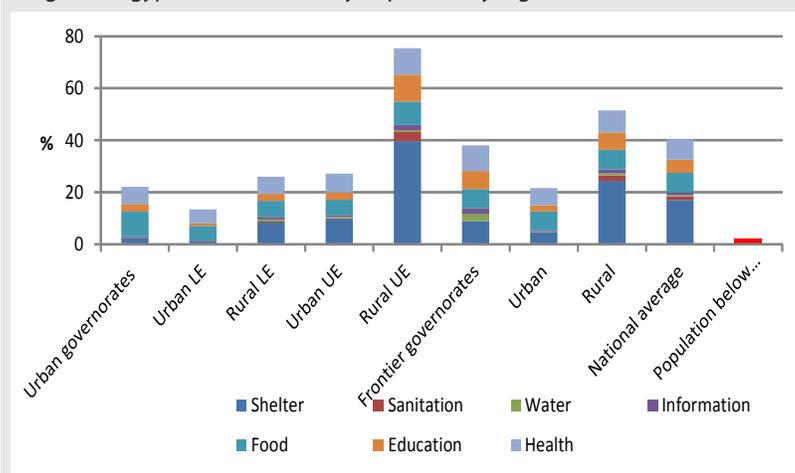
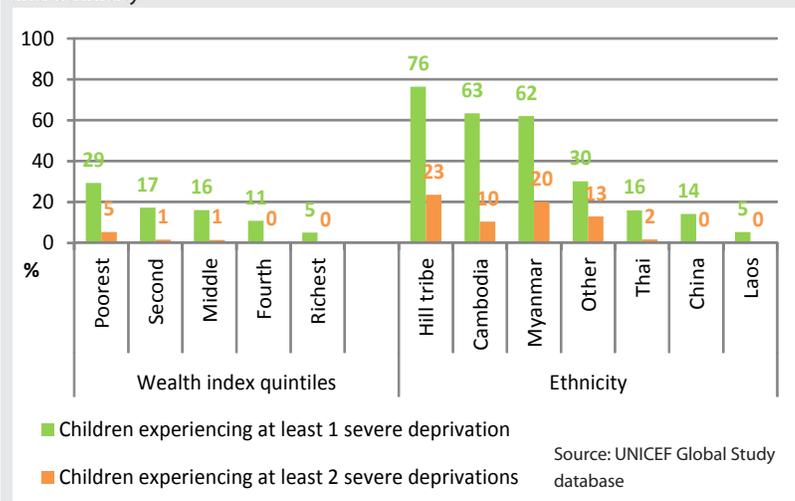


Figure 5. Thailand: Children experiencing severe deprivations by wealth quintile and ethnicity



DEPRIVATION OF EMOTIONAL RESOURCES: UNDERSTANDING POVERTY FROM A CHILD'S PERSPECTIVE

Multidimensional child poverty measures need to take spiritual and emotional deprivations into account; however quantifying emotional deprivation is a complex task and this dimension is often overlooked. As a first step, a number of countries participating in the Global Study on Child Poverty and Disparities conducted qualitative research to gain insight into whether the data accurately reflected the plight of children living in poverty, as well as attempted to address how being deprived of basic needs affects their emotional well-being.

The Child Poverty Study in Bhutan found that 23 per cent of school aged children are severely deprived of education and the education analysis was further enriched by children's reflections:

"The worst thing that happened to me was the loss of my father [...] My mother and grandpa decided to send me to a school. I was so excited, but on reaching the school for admission, the headmaster did not accept me, as I could not present my health card. My health card got burnt down along with my house. That day onwards, I gave up the hope for getting educated. My mother sent me here in Bumthang to work as a domestic worker. At least, I am free from the stepfather's cruel treatment. I am quite happy here."

-10 year old girl

"When I was about seven, I was in the village looking after the cattle. Those were the most difficult part of my life. I had to walk in the forests without any slippers looking after the cattle. My father always promised me that he would send me to school, but he never did that. When he got a work in Bumthang, he even bought me school uniform to get admitted in Wanduecholing School, but by that time I was considered too old for the school."

-14 year old boy

The Kosovo Child Poverty Study team carried out a qualitative study using focus group discussions. Children who participated in these discussions were from Albanian, Serbian and other minority communities. The focus population of children included Albanian, Serbian and minority communities. At the heart of the study findings were the children's clear recognition that poverty is damaging, both personally and socially; and an acute awareness that some minority children have experiences that vary significantly from those of other children:

"Sometimes poor children don't know how to write while the rich ones know how to write. Children who don't know how to write are yelled

at by the teacher. The teacher beats them with a stick. There are cases when the teacher throws pupils out of class when they did not know how to write, and tells them not to come back without their parents".

-9 year old Ashkali boy

These qualitative studies are a useful, powerful and integral part of the analysis in understanding how poverty affects children's emotional well-being. It is critical that these qualitative analyses are undertaken in conjunction with routine quantitative analyses in order to verify and enrich policy makers understanding of child well-being.

POLICY IMPLICATIONS

The Brief has demonstrated that child poverty based on two or more severe deprivations varies markedly from using a single income/consumption poverty measure: child well-being is not only dependent on accessing a certain level of household income; it is also about access to adequate nutrition, education and so forth. Helping families move out of poverty means moving beyond solely increasing incomes, to aiming for greater social investment in general, as well as monitoring of progress and impact.

Initial analysis suggests that countries that have a range of policies in place to support families with children generally have lower severe child deprivation rates, as is evident in Kyrgyzstan, where 22 per cent of the population is living below \$1.25 and 6 per cent of children experience two or more severe deprivations. This is in part due to the Government's commitment to social service delivery and some of the benefits of the former system are still evident, such as high education outcome levels. There are various policies and programs in place that address child well-being, for example the "Unified Monthly Benefit" for children from poor families, primary and secondary education is free, the proportion of public expenditure for health services for

the poor has increased, social benefits are provided to disabled children and so forth. However, these social safeguards are inadequate and insufficiently targeted as evidenced by 13 per cent of children in the Batken region experiencing two or more severe deprivations as opposed to 1 per cent in the Chui region (National Study on Child Poverty and Disparities in the Kyrgyz Republic, 2009).

Policy design and implementation are key factors in ensuring that children benefit from policies aimed at improving child well-being. These policies may include, among others: free/low cost basic health care services, maternity benefits and the availability of low-cost childcare that enables both parents to work. National priorities need to reflect strong linkages between these policies and child well-being, as well as monitoring of progress and impact. Social protection measures are increasingly gaining recognition as successful tools in reducing child poverty as these measures commonly address social vulnerability and take into account the inter-relationship between exclusion and poverty.

The analysis has also indicated that a high GDP per capita is not necessarily directly associated with low levels of child poverty, and likewise a low GDP per capita is not necessarily associated with high levels of child poverty. Looking at countries with similar levels of GDP we see highly disparate rates of child poverty which can be explained by varied investments and policies that benefit children. For example, both Tanzania and Uzbekistan - which are low income economies, who have historically prioritised social investments - post far better child well-being indicators than their GDP would imply. On the other hand Tanzania's high rate of income poverty (89 per cent of people live below the \$1.25 poverty line) also provides a case in point that it is critical for social investments to be complemented with income enhancing policies.

Children suffering from two or more severe deprivations often experience cumulative disadvantages and special attention needs to be paid to these children and their families. This Brief emphasizes the importance of gaining a holistic understanding of the underlying reasons to these poor child outcomes. This Brief also opens up opportunities for further analysis, with the primary hypothesis that countries that implement holistic policies/strategies that address the multidimensionality of child poverty are likely to be more successful in advancing children's rights and well-being rather than countries with piecemeal strategies.

SELECTED REFERENCES

1. Delamonica, E., Minujin, A., Davidziuk, A., & Gonzalez, E.D. (2006). Children living in poverty: Overview of definitions, measurements and policy. UNICEF Working paper. New York. www.unicef.org/policyanalysis/files/Children_Living_In_Poverty.pdf
2. Fajth, G. and K. Holland Child Poverty: A perspective. UNICEF DPP Working Papers 2007. www.unicef.org/videoaudio/PDFs/Poverty_and_Children_a_Perspective.pdf
3. Gordon, D., Nandy, S., Pantazis, C., Pemberton, S. and Townsend, P. (2003). Child poverty in the developing world. The Policy Press, Bristol. [www.bristol.ac.uk/poverty/child poverty.html](http://www.bristol.ac.uk/poverty/child%20poverty.html)
4. UNDP (2004). Dollar a day, how much does it say? In Focus - International Poverty Centre for Inclusive Growth (IPC-IG), Brasilia www.ipc-undp.org/pub.do#inf
5. UNDP (2010) Human Development Report. The Real Wealth of Nations: Pathways to Human Development http://hdr.undp.org/en/media/HDR_2010_EN_Complete_reprint.pdf
6. UNICEF (2005) Childhood under Threat: State of the World's Children 2005. UNICEF NY www.unicef.org/
7. UNICEF (2010) Child Poverty and Disparities

- in Bhutan: Towards Betterment of Child Well Being and Equity. Thimphu: The Centre for Bhutan Studies. Not yet published.
8. UNICEF (2010) Child Poverty and Disparities in Egypt: Building the Social Infrastructure for Egypt's Future. http://globalstudy2.googlepages.com/Egypt_English_Fullreport_Childpovert.pdf
 9. UNICEF (2010) Child Poverty and Disparities in Thailand <http://sites.google.com/site/docsunicefgschildpovdisp/home/documents/Childwellbeingreport-fullreport.pdf?attredirects=0>
 10. UNICEF (2009) Child Poverty Network Consolidated Reply – Undertaking Qualitative Research as Part of the Global Study on Child Poverty and Disparities
 11. UNICEF (2007) Global Study Guide on Child Poverty and Disparities. UNICEF NY www.unicefglobalstudy.blogspot.com <http://unicefglobalstudy.googlepages.com/UNICEFGlobalStudyGuide.pdf>
 12. UNICEF (2010) Global Study on Child Poverty and Disparities: the Case of Philippines, Makati
 13. UNICEF (2009) National Study on Child Poverty and Disparities in the Kyrgyz Republic. UNICEF, Bishek <https://sites.google.com/site/kyrgyzstanchildpovertystudy/>
 14. World Bank, World Development Indicators (2006) GNI per capita (current international \$) <http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD>
 15. World Bank, World Development Indicators (2006) GDP per capita (current \$US) <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
 16. World Bank, World Development Indicators (2005) Health Expenditure per capita (current US\$) <http://data.worldbank.org/indicator/SH.XPD.PCAP>
 17. World Bank, World Development Indicators (various years) Poverty headcount ratio at \$1.25 a day (PPP) (per cent of population) <http://data.worldbank.org/indicator/SI.POV.DD>

ABOUT THE WORKING BRIEF SERIES

This Working Brief was compiled by Sharmila Kurukulasuriya and Solrun Engilbertsdottir of UNICEF's Division of Policy and Practice (DPP). For more information on this issue, or to share feedback, please contact skurukulasuriya@unicef.org or sengilbertsdottir@unicef.org.

UNICEF DPP notes are prepared to facilitate greater exchange of knowledge and stimulate analytical discussion on social policy issues. Their findings, interpretations and conclusions do not necessarily reflect the policies or view of UNICEF. The designations in this publication do not imply an opinion on legal status of any country or territory, or of its authorities, or the delimitation of frontiers. The editors of the series are Isabel Ortiz, Gaspar Fajth and David Anthony of the Policy, Advocacy and Knowledge Management section. For more information on the series, or to submit a working brief, please contact iortiz@unicef.org, gfajth@unicef.org or danthony@unicef.org.