Briefing

Definitions and measures of poverty

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Our vision is a world without poverty that invests in human security, where everyone shares the benefits of opportunity and growth

Development Initiatives

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Introduction

Poverty is a multidimensional concept that seeks to measure *levels of deprivation encountered by a person, household or community.* Although most of the literature focuses on indicators of deprivation such as income, food, access to housing and so on, the choice of indicators to measure levels of deprivation can often be arbitrary and hence may not reflect a full-scale measure of unmet basic needs in different social contexts. This discrepancy leads to concepts such as poverty, social exclusion and vulnerability being used interchangeably in development discourse.

While allowing for variations in indicators of unmet basic needs, **poverty is generally considered to be a measure of deprivation of the basic needs that a person, household or community requires to have a basic standard of living**. Deprivation can be measured either in terms of a **lack of resources** (eg income, assets), **capabilities** (eg skills, knowledge, technology) **or both**.

Key facts and figures on poverty

1. Close to 900 million people around the world live in severe poverty based on an income poverty line of $1.90 a day in 2015.
2. Poverty levels remain high globally, and are particularly concentrated in sub-Saharan Africa and South Asia.
3. Global poverty is concentrated in lower middle income countries and countries dependent on natural resources as well as in fragile and conflict-affected states.
4. Looking beyond the income measure, 1.6 billion people are considered poor across measures of access to social services and security, with the largest global share of poor people being in South Asia and the highest intensity in sub-Saharan Africa
5. Among other factors, demographic growth is a major challenge to poverty reduction in sub-Saharan Africa.
6. Meeting the 2030 target of eradicating poverty is contingent on addressing income distributional patterns as well as incorporating environmental factors in economic policies.
7. Climate change could account for close to 10.1 million more poor people by the middle of the century.
8. Even if the world succeeds in reaching its target of 3% poverty by 2030, deep pockets of poverty will still remain around parts of the world therefore Sustainable Development Goal 1 will not be met.

Source: World Bank Global Monitoring Report 2015

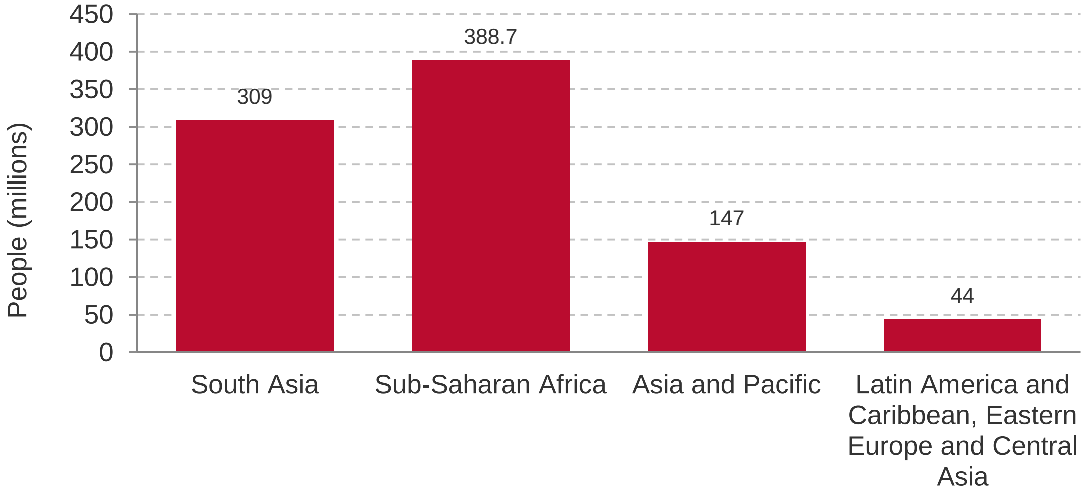
Measuring poverty

Income poverty measurements generally use the physiological deprivation model[1] to assess lack of access to economic resources (income) to satisfy basic material needs. A person (or household) is considered poor if the person's (or household's) income cannot acquire the basket of goods and services **used to define a threshold for poverty**. The monetary value of the basket is the **poverty line** and the population of people and households **whose incomes are below this line,** is then derived through a **head count**.

While this approach is the most currently used in household and poverty surveys, it is important to understand that its focus is exclusively on income and expenditure as surrogates for measuring access to goods and services. Concerns about its limitations as a tool for assessing people's level of deprivation has led to definitions that consider other non-monetary aspects such as human rights values enshrined in the UN Human Rights Charter, The UN Development Programme's Human Development Index has integrated more dimensions to the income/expenditure measures, notably life expectancy, educational attainment and a measure of income (GNI Index). **Human development** is **defined** as the process of enlarging people's freedoms and opportunities and improving their well-being.

Based on income/expenditure measures of poverty, the prevalence of poverty is highest in sub-Saharan Africa and South Asia.

Figure 1: Distribution of poor people across global regions

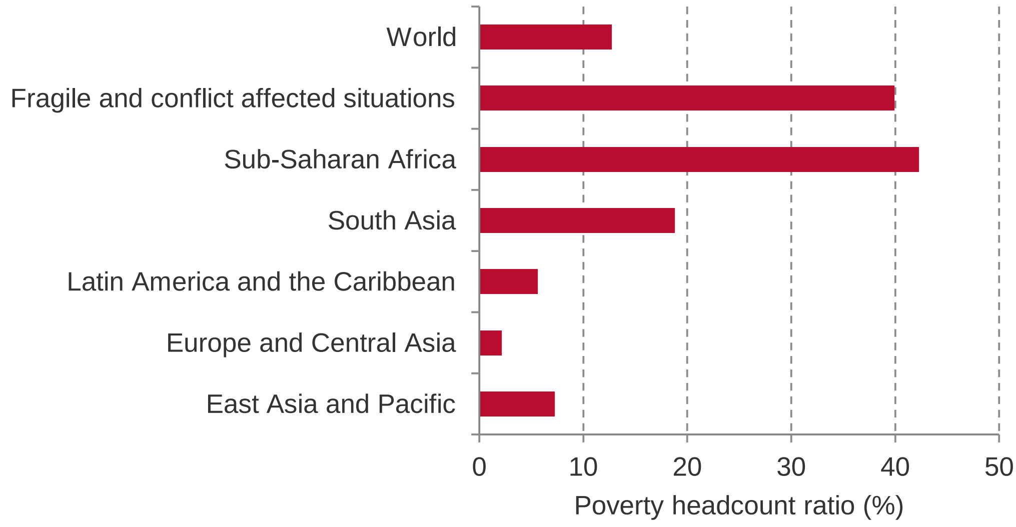


Source: Development Initiatives based on Global Monitoring Report 2015 figures

Latin America, Eastern Europe and Central Asia have the least prevalence rates, and as figures show, the lowest depth and severity rates as well. When high income countries are excluded from the analysis, sub-Saharan Africa and South Asia still have the highest incidences of poverty, while fragility and conflict appear as key drivers of poverty.

[1] See www.un.org/esa/socdev/poverty/papers/paper_shaffer.pdf

Figure 2: Poverty headcount ratio across selected global regions (2012), and in fragile and conflict-affected situations



Source: World Bank
Note: Poverty headcount ratio at $1.90 a day, 2012.

Determining poverty lines, depth and severity measures

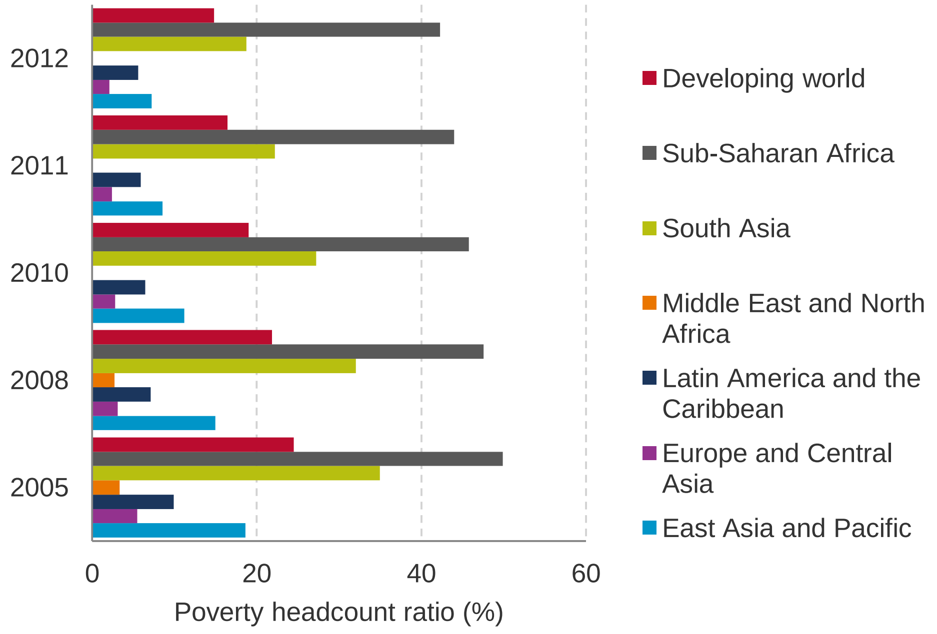
The poverty line determines the threshold of income or expenditure, separating poor and non-poor people. Most countries use multiple poverty lines to capture monetary versus non-monetary measures of poverty, and how people’s and household incomes are distributed around the poverty line, hence the determination of **relative poverty** and **absolute poverty.**[2] World Bank poverty lines are based on official national poverty lines or calculated by World Bank staff based on national income and expenditure surveys.

Relative poverty compares the person or household’s income (expenditure) to the income distribution of the country of residence; it is a first indicator of inequality. As a context-specific measure, it refers to the minimum amount of income that a person needs to enjoy what is considered an average living standard in the country of reference. Relative poverty therefore varies from one country to another and from one region to another. When a person or household is severely deprived of the basic needs considered a strict minimum to enjoy a basic standard of living, they are considered to be in absolute poverty. Absolute poverty is measured with reference to the cost of a basket of minimum basic goods and services, for instance food. Populations or households that live below the food poverty line are considered to be in absolute and extreme poverty (also severe poverty and sometimes chronic poverty.

Having determined the poverty line, the incidence of poverty (headcount index), determines what percentage of the population (or households) live below the cut-off point. In this way, the headcount index states the proportion of the population whose income falls below the poverty line for the particular context of study. As a result, different poverty lines yield different headcount indexes within a given income distribution pattern.

[2] The poverty line = food component + non-food component. If someone is absolutely poor then they are below the two components combined. If they are extremely poor then they are below the food component alone.

Figure 3: Poverty headcount ratio across selected global regions over time

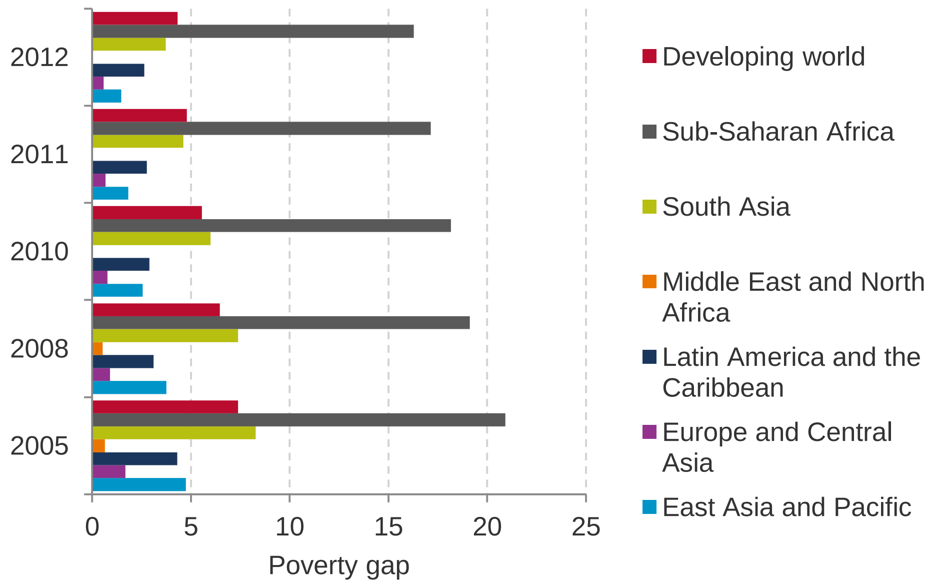


Source: Development Initiatives based on World Bank PovCal Net figures, 2016
Notes: Data for Middle East and North Africa not available from 2010–2012.

Poverty headcount ratios are highest in sub-Saharan Africa, indicating higher proportions of people living below the poverty line there than in any other region. This proportion has not shifted favourably over the period of observation, indicating that policies and development outcomes have not significantly altered population distribution around national poverty lines. A different situation is observed for South Asia, where, overtime, the poverty headcount ratio has dropped much more significantly than for sub-Saharan Africa.

The headcount ratio, alone, is not sufficient in determining how populations fare compared with the rest of the population living above the poverty line. Measuring the **poverty gap** (how far below the poverty line a person or a household is – also known as depth of poverty) captures the average shortfall in income of the population living below the poverty line. Squaring the poverty gap (**severity of poverty)** gives an indication of inequality among the population living below the poverty line, in other words a measure of the severity of deprivation of those living in absolute poverty.

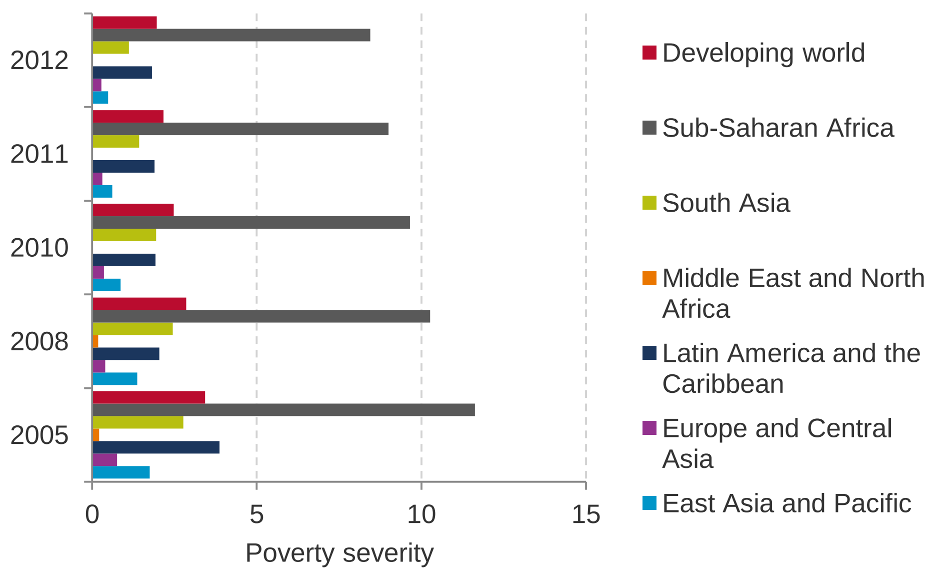
Figure 4: Poverty gap ratio across global regions



Source: Development Initiatives based on PovCal Net figures
Note: Data for Middle East and North Africa not available from 2010–2012.

While the poverty gap has improved significantly in the developing world over the years, sub-Saharan Africa has not succeeded in significantly closing this gap (unlike Europe and Central Asia), and lags behind South Asia in reducing the gap over time. The inelasticity of the poverty gap explains the continuing severity of poverty in sub-Saharan Africa, driven mainly by demographic and income factors.

Figure 5: Poverty severity across global regions



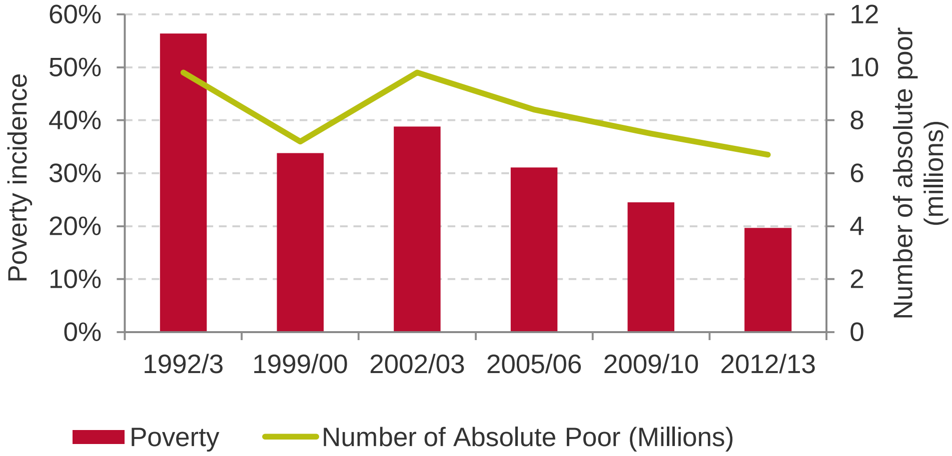
Development Initiatives: Based on PovCal Net figures
Note: Data for Middle East and North Africa not available from 2010–2012.

In addition to analyses of the population below the poverty line, the **concept of inequality** analyses the whole population. Inequality measures analyse the distribution of the total population using various indicators of wellbeing including wealth, land ownership, educational attainment health and so on.

Country illustrations: Kenya and Uganda

Poverty has significantly reduced in Uganda over a two-decade period.

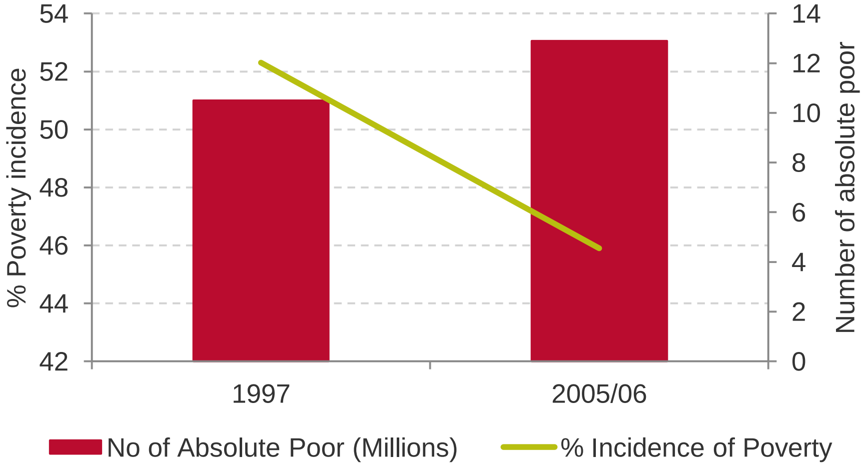
Figure 6: Poverty trends in Uganda across household survey years



Source: Ministry of Finance Planning and Economic Development, 2014

The headcount of people living in absolute poverty has dropped by more than half, faster than the sub-Saharan African average. Since 2003, the poverty incidence has steadily declined –from 38.8% in 2003 to 19.7% in 2012/2013. A country's drop in absolute poverty and incidence of poverty figures is highly contingent on developments on the demographic front. While poverty incidence and absolute poverty conjointly dropped in Uganda over the years, the situation in Kenya demonstrates the effects that rapid demographic growth and income distribution patterns can have on overall poverty figures.

Figure 7: Poverty trends in Kenya across household survey years



Source: Kenya National Bureau of Statistics, 2007

Poverty and vulnerability

Measures of poverty through the use of poverty lines (and the various sub-definitions that result from its use), are based on a number of assumptions that also point to limitations of the methodology. A poverty line is determined using monetary and non-monetary indicators. Where monetary indicators are used (eg the monetary value of the basic consumption basket), two issues arise:

1. Changes, over time to this monetary value (hence frequent adjustments to the value of the poverty line)
2. Representativeness of the basket as reflective of the consumption pattern of households and individuals.

Because both of these issues are context specific, (like most measurements in the social sciences), comparisons between countries and across time periods are difficult and may not make sense always. For most developing countries, identifying the representative basket requires household income/expenditure surveys that can be costly. For instance, although consumption patterns vary between rural and urban households, some countries calculate a single poverty line (as the national poverty line), and therefore take little account of different consumption patterns and consumer price indices between urban and rural settings.

Given these methodological caveats, poverty lines sometimes give a static story of how individuals and households fare compared to the (subjective) threshold of the poverty line below which people and households are counted as poor.

However, understanding and addressing poverty requires a dynamic view of how poor people and households fare overtime in terms of income and expenditure thresholds. In real life, people's incomes and general welfare are not secure; both are susceptible to changes – shocks that may lead to reduced capacities to earn and spend. **Vulnerability** is the risk today (for a person or a household) of falling below the poverty line tomorrow, or for a person or household already below the threshold, of falling deeper into poverty. This probability increases or decreases through both micro- and macro-environmental factors affecting people and households' incomes and welfare, such as natural disasters and violent conflict.

Measuring vulnerability requires projections into the future of current per capita consumption and assessing likelihood of significant reductions due to 'welfare shocks'. For designing forward-looking poverty reduction policies, it is necessary to go beyond the static measure of poverty – making assumptions on how households'/people's incomes will fare overtime, due to changes in economic, social and environmental factors.

Finally, there is growing recognition that poverty headcounts may not be as inclusive as thought so far: homeless people, internally displaced persons and refugees are just some categories that are not counted once a poverty line has been determined. Growing urban slums in developing countries make it difficult to 'count' everyone, considering the cost volatility of survey sample size variations and the long lapses between national census exercises.

Determinants of poverty

Over and above people's level of poverty and vulnerability to increased poverty, research has identified demographic and social factors that increase the likelihood of people or households falling below the poverty line. These factors, also called correlates of poverty, explain, to a certain extent, why people or households with certain characteristics tend to fall below the poverty line.

- **Household demographics:** the size of the household (number of people), the age structure, the dependency ratio and the sex of the household head) and geographical location – rural or urban – are known key determinants of household poverty.
- **Individual characteristics:** a person's sex, age, employment status, level of educational attainment, property owned and socio-economic profession are key determinants of poverty.

Although research has already gone into studies on poverty, poverty lines, inequality and the determinants of poverty, current statistical information offers little or no disaggregated data that can be useful at subnational levels of government for planning and poverty reduction. Poverty statistics are generally compiled at national levels, and although some countries have made outstanding efforts to disaggregate such information (Bangladesh, through the use of multiple poverty lines, for instance), it is still a difficult task to compile poverty data in remote rural areas and to ensure that *everyone* is counted. National poverty lines and studies in inequality (because they are based on mean income) mask significant differences between household and people's incomes, and fail to factor in 'locational' supply and quality of non-income factors.

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