

COMMENT

## Climate-proofed and inclusive



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## Projects to help people adapt to climate change should not inadvertently worsen living conditions of the poor

**H**ow will future climate change affect the poor and how does one address both poverty and climate change? This is a conundrum faced by policymakers in India and other developing countries. Moreover, 'climate-proofing' sustainable development efforts is important; that is to say, current efforts should remain relevant in the face of future climate impacts.

Among development practitioners, a paradigm shift has taken place in the last three decades or so: income alone is no longer considered as being sufficient to estimate and address poverty. One can have assets and a reasonable income and yet be poor in terms of education, nutrition, health and other living conditions. Nevertheless, in India and many other countries, governments continue to use income or consumption to estimate poverty, with specified thresholds associated with the 'poverty line'.

On this basis, using consumption expenditure data, the erstwhile Planning Commission estimated poverty in India to be at 22% of the population in 2011-12.

### Dimensions of poverty

People living in poverty in various parts of the world share multiple conditions and life circumstances that have been measured and studied as a proxy to assessing poverty. Following the work of Amartya Sen, in particular, and other welfare economists and political philosophers, the dimensions that are considered often include living standards, assets, health, income, consumption and status in their societies. Thus, measures such as nutrition, quality of the floor and roof of houses, access to energy services and drinking water, level of education, jobs, and social conditions such as caste all become relevant when one tries to understand the different manifestations of poverty.

Some countries, such as Mexico, Chile and Colombia, use several dimensions to record poverty using the MPI (Multidimensional Poverty Index), a versatile tool developed by the Oxford Poverty and Human Development Initiative (OPHI) that looks at the dimensions of education, health and standard of living, giving them all equal weightage.

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Each dimension includes several markers or indicators that are measured to recognise deficiencies in each. Those who are deprived in at least a third of the weighted indicators are regarded as poor. Measures such as MPI help us to estimate not only how many people are poor, but also the quality and depth of their poverty. One can also estimate the number of people who are likely to become poor as a result of slight additional deprivations, as well as those who are in extreme poverty. The most recent MPI for India calculated using India Human Development Survey data of 2011-12, estimates that 41% of the people were multi-dimensionally poor.

The adverse effects of climate change that are anticipated in South Asia are droughts, floods, heat waves, sea level rise and related problems such as food shortages, spread of diseases, loss of jobs and migration. These will harmfully affect the poorest and further deteriorate the quality of their lives. Numerous studies have shown that the poor suffer the worst effects from climate variability and climate change. One can understand these relationships by recognising that severe storms damage inadequately built houses; floods wash away those living on riverbanks; and the poorest are the most affected by severe droughts that lead to food shortages and higher food prices.

Projects and programmes designed to help people adapt to the effects of climate change should therefore not inadvertently worsen the living conditions of the poor. Adaptation programmes ought to be designed so that challenges faced by people living in poverty are recognised and reduced. Development policies that consider the context of climate change are often called "climate proofing development". But even the experts do not know how this should be done for specific sectors, policies, or particular local situations. Multi-dimensional understanding of poverty becomes important in this context of research and policy.

## Multiple vulnerabilities

If one were to estimate the various vulnerabilities for poverty at district levels and then overlay expected climate change impacts for these areas, future local problems due to the combination of these would become clearer for policymakers. It may of course be impossible to predict, with great certainty, the precise impact of future climate change at the local scale and estimate how these may interact with current shortcomings in particular dimensions of poverty. Yet, there is already enough general understanding from different parts of the world to take a commonsensical approach to addressing the combination of multiple vulnerabilities.

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If we learn for example that a district with severe nutritional deficiency might anticipate extended periods of drought from climate change, then the focus ought to be on improving local food access and to combine this with managing water efficiently to prepare for future water shortages. Similarly, proposed improvements in sanitation and housing ought to factor in the increased likelihood of future flooding events in low-lying areas and use appropriate design strategies that are resilient to water-logging.

In 2015, countries agreed to meet 17 universal goals, officially known as the Sustainable Development Goals (SDGs). The SDGs have targets and indicators that cover a broad range of concerns for human welfare. They include food security, education, poverty alleviation, access to safe and adequate water, energy, sanitation and so on.

The deadline for reaching the SDGs is 2030. This will be a big test for India and other developing countries because these are in fact the major development challenges that the poor countries have been confronting for decades. India is taking the SDGs quite seriously and the NITI Aayog has been coordinating activities relating to their implementation, and emphasising their interconnected nature across economic, social and environmental pillars.

Yet, it is critical to recognise that climate variability and climate change impacts can prevent us from reaching and maintaining the SDG targets. Measuring poverty through its different dimensions, along with the consumption measures, would help policymakers figure out which aspects of poverty expose the poor and exacerbate their vulnerability to climate change.

Through such a process, India could also serve as a standard for other poor and developing countries that are beginning to think about inclusive “climate proofed development”.

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