Subjective and Objective Measures of Poverty: Utility and Pitfalls

By Prof. Anirudh Krishna

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Objective: “Having actual existence or reality; uninfluenced by emotions or personal prejudices.”

Subjective: “Proceeding from or taking place in a person's mind rather than the external world.”

Given how the terms “objective” and “subjective” are usually understood, we should looking to work in the realm of poverty with a purely objective definition. However, coming up with any such definition – rooted in lived reality, unaffected by personal biases or arbitrary judgment calls, unchanging across time and space, and commonly accepted as such – is, in fact, an impossible task. Objective and subjective elements are invariably commingled within every definition and measure.

Commonly defined as “having little or no wealth and few or no possessions” or as “the state of one who lacks a usual or socially acceptable amount of money or material possessions,” the concept of poverty lacks operational clarity, admitting diverse interpretations and different yardsticks. What types of wealth and what kinds of possessions should be considered while measuring poverty? What other types are better left out? What exactly constitutes “little” or “few” or “usually or socially acceptable”? Does the relevant threshold change as society itself progresses? Or should standards that were appropriate to cavemen continue to be applied even today?

No universally valid answers have been (or can be) given for any of these questions. The act of identifying and measuring poverty is full of subjective judgment calls. As a result, a vast array of methods and measures has been developed, each of which is appropriate for examining a different dimension of poverty.

Instead of persisting with a futile search for some purest (or most objective) measure, it is more useful to select the method and measure that are appropriate to the goal being pursued. “Objective” measures, claiming universal applicability, are more useful in relation to one set of purposes. Other, more localized, measures based upon context-specific conditions and perceptions – which by convention are regarded as “subjective” (although no clean distinction is realistically possible, as argued below) – have proved more useful in relation to other important goals of poverty reduction. Having manifold methods and measures within one’s toolkit enables one to tackle multiple goals.

Subjectivity in “objective” measures

In its essence, the dichotomy between subjective and objective measures of poverty is a spurious one. All measures of poverty contain both objective and subjective elements. The seeming precision – and apparent objectivity – of the World Bank’s dollar-a-day (now $1.25/day) measure of poverty is rooted, in fact, in a number of subjective judgment calls. Rather than selecting wealth or income as the basis for measurement, World Bank statisticians, following convention in a number of countries, particularly India, focus instead upon household consumption expenditures. Statistical experts in different developing countries select a calorific norm – usually between 2,000 and 2,500 kcal/person-day – which led them to construct a commodity bundle capable of delivering this nutritional requirement. Multiplying this commodity bundle by a vector of country-specific price indices resulted in the generation of national poverty lines. When adjusted for purchasing power parity, a large number of national poverty lines were found to cluster around the $1.08 per day figure. This happy coincidence resulted in the adoption by the World Bank in 1990 of the now-famous dollar-a-day poverty line.

Notice how many subjective judgment calls are implicated within this best-known exemplar of “objective” measurement. First, a calorific norm was subjectively selected by statisticians; nutrition experts continue to dispute these particular norms. Second, public goods – such as higher-quality public education, safer roads, better-maintained public gardens, cleaner air, fairer governance, etc., all important aspects of well-being – are excluded from these calculations. (However, household expenditure on health care – a measure of ill-being – is included.) Third, a one-month recall period is most often utilized: Surveyors ask households to recall their consumption patterns for the one-month period preceding the survey. Studies have shown, however, that utilizing shorter (or longer) recall periods can result in producing widely different results. Similar differences follow if healthcare expenses are excluded or if a different calorific norm or price vector is utilized. So why should figures produced using these particular assumptions be regarded as the most “objective” ones?

Comparing these numbers across countries introduces yet another set of subjective elements: Whose consumption bundles should be considered as the basis for these comparisons – citizens of richer countries or those of
poorer ones? What type of Big Mac Index (or purchasing power parity comparison) should be used to harmonize cross-national price differences? Some judgment calls have to be made in each case. How these calls are made influences the calculation of poverty.

My intention in describing the calculations and assumptions that underlie dollar-a-day poverty is not to undermine the importance of this measure; only to demonstrate how subjective elements invariably intrude. Despite these cascading subjective elements, dollar-a-day is the best available measure for some purposes. It is especially useful for making comparisons of the total numbers of people in poverty across countries and over periods of time.

But it is less useful – and the underlying subjective choices are not so easy to justify – when it comes to some other purposes related to poverty reduction. For example, if a broader notion of poverty is being pursued including, not only personal consumption levels, but also access to public goods and essential social services, including health and education, then the Human Development Index of the United Nations constitutes a preferable measure. Other measures – such as poverty gap, squared poverty gap, etc. – are more useful if one is interested to examine, not only the total numbers of people in poverty, but also the depth and intensity of poverty, measuring how far below a (subjectively-selected) threshold of poverty people in some country or region tend to live.

**Whose objectivity matters?**

All of the measurements of poverty discussed above (which are conventionally included within the class of “objective” measures) share three qualities, which are at the same time a source of both weakness and strength. First, these measures have large computational requirements, requiring vast amounts of data and sophisticated analytical tools. A project manager on the ground, seeking to make a quick yet reliable assessment, cannot expect to use any such computationally-intensive measure.

Second, because of an imperative for universal application, these measures have not been designed for any particular economic or cultural context. Dollar-a-day as applied in rural Rwanda is much the same as in downtown Lima, Peru (with price differences constituting usually the only local correction). Thus, while enabling cross-country comparisons to be made – a notable strength – “objective” measures do not relate to the actual facts of existence in any particular context, constituting a weakness.

Third and related to the previous point, these measures are derived from experts’ statistical calculations, being based on outsider’s determinations of appropriate poverty thresholds. They do not constitute the reality that poor people see for themselves: Few poor people anywhere in the developing world define themselves in terms of dollar-a-day.

In ten years of investigating poverty on the ground, in remote rural communities as well as urban neighborhoods across five countries, I learned many important facts. One basic fact that I learned early on, while working initially in villages of Rajasthan (a state in India), was that people in these communities have their own functional understandings of poverty. Creditors do not press too hard for repayment upon people who (in the villagers’ reckoning) have fallen upon hard times. Food and other forms of community assistance are provided on special occasions to people identified by their neighbors as poor. In other communities and countries that I studied subsequently I found similarly robust shared understandings of poverty.

People know who is poor and who is not, even if they are unable to give concrete description to the underlying definitions. Such shared everyday understandings are much more real for these individuals than any definitions proposed from the outside. Locally-constructed understandings of poverty constitute the criteria within these communities for identifying who among them is poor. They also constitute the threshold or objective that defines the goals and the strategies of poor people.

What people do in order to deal with poverty depends on what they understand to be the defining features of this state. Thus, if one is to understand how poor people cope with and overcome poverty, it is important to come to grips with local understanding of poverty. While subjective – existing in people’s minds rather than on paper – these local definitions are neither esoteric nor idiosyncratic. I found that people in the same context widely agree on the same broad definition, applying it consistently to identify poverty and to assess its depth in any particular case. Since they are not trained methodologists, poor people do not, however, translate their shared local understandings into any tangible scale. To an outsider, therefore, these discussions may seem complex; the underlying subjective choices are, too often, opaque.

One is faced, therefore, with an interesting conundrum: the measures that experts utilize can be distant from the local reality; at the same time, local understandings of poverty may be shrouded in mystery. Resolving this conundrum is critical both for gaining deeper knowledge and for providing assistance more effectively.

One other centrally important fact I learned is that poor people do not usually sit idle, waiting for program benefits to come their way. The image of the Cadillac welfare queen is a product of extreme right-wing American pop culture. Most poor people work very hard; they have to, simply in order to make ends meet. Too rarely do outsiders come by with meaningful assistance, and even more rarely do such outsiders continue to water the tree of assistance until it bears fruit. In the most part, poor people who have escaped poverty have waged their own struggles, fashioning their own strategies. Outside assistance works best when it supplements – rather than displacing or bypassing – these ongoing self-help efforts of poor individuals and households.

In order to assist poor households more effectively, one must understand their strategies first. Understanding these strategies requires learning the definitions and understandings upon which these strategies are based. As we saw earlier, however, these understandings are not explicitly stated; even more rarely, are they laid out in “objective” terms. This apparent amorphousness of contextual understandings has too often led to disain and disavowal by external investigators. Instead of persisting, investigators have too often retreated to positions where their own “objective” measures are regarded as the only “right” ones.

There is another way. It involves some hard work, but it yields useful insights and helps craft better solutions. It has been immeasurably rewarding for me. In the next section, I will describe how local or “subjective” measures can be made more explicit and scalable, to the benefit of all concerned.

**Learning through “objectivizing” subjective measures**

A great deal has been learned from earlier work that relied upon subjective (that is, local)
understandings. However, these understandings themselves were rarely probed, and even more rarely, systematized. As a result, the whole subject of subjective measurement has gained an aura of respectability while remaining somehow still mostly abstruse.

If one is to work with local understandings—and we have examined above why it is useful and necessary to do so—these often shadowy and implicit understandings have to be brought clearly into focus, being grounded in visible and verifiable facts. More usefully, they have to help generate a scale that can be used to evaluate which households or individuals are poor in the particular local context—and which others are not. To be able to work responsibly with one another, outsiders and local residents must agree on the constituents of poverty. What local residents hold in their minds as the proper understanding of poverty must be converted into a scale of measurement that everyone can see.

I developed a methodology that helps with this objective. Named the Stages of Progress method, it translates local understandings of poverty into contextually-relevant scales of measurement. Nothing is left to the imagination; every step in the scale has an empirical referent, which is independently verifiable, therefore “objective” in the dictionary sense. Several other researchers and practitioners have also found this methodology useful for diverse tasks of inquiry, evaluation, and program development.1

Briefly, Stages of Progress develops with the participation of community groups a scale of sequentially-acquired assets and capabilities, corresponding respectively to successively higher stages in the move up from acute poverty. The capacity to acquire food on a regular basis invariably comes first in this sequence of measurement. Other stages of progress are more context-specific. Table 1 reproduces the stages of progress commonly reported in 40 village communities of Western Kenya.

Virtually, the same sequence of stages was independently reported by all 40 community groups studied in this region. Some differences were recorded in higher-level stages. At the lowest stages, however, when households are still desperately poor or just about coming out of dire poverty, there were virtually no differences in the sequences narrated by different community groups. The first six stages, in particular were commonly reported by all 40 groups. There was common agreement that households usually progress out of poverty through pathways that go successively through these six consecutive stages. “After crossing which stage is a household no longer considered poor,” we asked the assembled community members, after drawing up this progression of stages. This cutoff was drawn by all village groups after Stage 6, indicating that a common social construction of poverty exists among communities of this region. Repeat exercises conducted two years later resulted in generating an identical sequence of stages of progress.

The constituents of poverty uncovered by Stages of Progress are identical within culturally-similar settings. But they vary across countries and regions that are economically and culturally dissimilar, reflecting differences in what are deemed to be “usual or customary” levels adequate for a good life within each particular setting. Stages of progress reported in 35 villages of Gujarat, a state in India, are similar among themselves. But they are different in some respects from the ones reported in Western Kenya. And they are, naturally, considerably different from the stages and cutoff lines reported in North Carolina, USA. Within countries and regions, therefore, Stages of Progress results are comparable. Comparisons across countries are not valid or exact.

This methodology was improved and refined progressively in the investigations carried out in four states of India, and in Kenya, Uganda, Peru, and USA. I studied a total of 398 diverse communities, examining pathways taken individually by more than 35,000 households. Important new findings have emerged from these studies, which could not have been discerned had I been using some distant or “objective” method. These findings help extend what we know about poverty reduction, but more importantly, they add new knowledge about how poverty is reproduced, that is, about how people come to be poor in the first place. Escapes from poverty and descents into poverty have occurred simultaneously within every one of the communities I studied. Many families have moved out of poverty everywhere, but in parallel many other families have become persistently poor.

Further, these results show how escaping poverty and falling into poverty are not symmetric in terms of underlying reasons: While one set of reasons is associated with escapes from poverty, a different set of reasons is responsible for descents. Health and health-related expenses are most prominently associated with descents into poverty in every region studied. Non-economic factors, particularly cultural practices related to marriages, funerals, and inheritance, also influence descents into poverty in some regions. However, a different set of factors is associated with escapes from poverty. Diversification of income sources—mostly with the help of informal sector positions and agriculture and not so much on account of industrialization or formal jobs—was most closely associated with escapes in all developing country regions.

Thus, present-day anti-poverty policies—

Table 1: Illustrative Stages of Progress (an example from Western Kenya)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Food</td>
</tr>
<tr>
<td>2.</td>
<td>Clothing</td>
</tr>
<tr>
<td>3.</td>
<td>Repairs to house (primarily thatched roof)</td>
</tr>
<tr>
<td>4.</td>
<td>Primary education for children</td>
</tr>
<tr>
<td>5.</td>
<td>Purchase chickens</td>
</tr>
<tr>
<td>6.</td>
<td>Purchase a sheep or great</td>
</tr>
<tr>
<td>7.</td>
<td>Purchasing local cattle</td>
</tr>
<tr>
<td>8.</td>
<td>Improvements to housing, furniture</td>
</tr>
<tr>
<td>9.</td>
<td>Secondary education for children</td>
</tr>
<tr>
<td>10.</td>
<td>Buy or lease land</td>
</tr>
<tr>
<td>11.</td>
<td>Purchasing dairy cattle</td>
</tr>
<tr>
<td>12.</td>
<td>Buying land/plots</td>
</tr>
<tr>
<td>13.</td>
<td>Constructing permanent houses</td>
</tr>
<tr>
<td>14.</td>
<td>Investing in a business</td>
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</tbody>
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Source: Krishna (2010)

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1 For further information, see Anirudh Krishna (2010): Stages of Progress, Oxford: Oxford University Press, chapter 2.
which are concerned almost exclusively with raising people out of poverty – can at best have only partial effect. Rather than any one ideal policy, two sets of policies need to be pursued in tandem: one set of policies for accelerating escapes from poverty, and another set of policies for preventing descents. Countries and communities that have simultaneously implemented both types of policies have the lowest numbers of people in poverty.

Both sets of policies – preventive policies and supportive policies – need to be contextually variegated. Considerable differences in rates and reasons exist not just across countries, as could be expected, but also within countries and regions. A decentralized methodology such as Stages of Progress – which is based on understandings of poverty familiar to local people – helps inquire into context-specific reasons, and is very useful for identifying locally-effective policy supports.

Matching methods with goals

I would not use Stages of Progress to make comparisons across countries. Such a task is quite distant from the purpose for which this method was originally devised, which is to study locally-important reasons associated with poverty descents and escapes. Equally, I would not suggest to a hard-pressed manager of emergency disaster assistance that she or he use dollar-a-day for assessing the relative need of different affected households. The data and computation requirements are simply overwhelming. More important, local residents will likely not consider such a-contextual measurements – and the resulting aid disbursements – to be fair and just. Much better to use a different measure, one rooted in shared local understandings, for this purpose.

More generally, the measure of poverty that is selected must be appropriate for the specific task in hand. Multiple tasks are associated with understanding and reducing poverty: It has become a truism that poverty is multifaceted. No single measure can reliably help explore all of poverty’s different facets and dimensions. Objective measures, such as dollar-a-day, are better used when the task in hand requires examining abstract aggregate realities, for example, assessing progress across countries.

Subjective measures, grounded in local realities, are better used for analyzing concrete context-specific circumstances and facts, for example, identifying the most effective use of aid resources in a given county or district. In order to most usefully achieve this end, subjective measures need to be “objectivized” to some extent. New methodologies, particularly Stages of Progress and some among its adapted versions, can helpfully assist with these objectives.