

Identifying and Understanding Chronic Poverty: Beyond Monetary Measures^{*}

David Hulme[†] and Andrew McKay[‡]

Zero draft, 11 June 2005

Introduction

Despite the renewed commitment over the past 15 years to poverty reduction as the core objective of international development discourses and policies, progress to this end remains disappointing. This is particularly evident in the extent to which the world is off track to achieve most of the Millennium Development Goals, globally and in most regions and countries (UNDP, 2003; UN Statistics Division, 2004). This inadequate progress raises important questions about the policies and strategies (centred around economic growth and human development) that have been adopted to achieve poverty reduction, as well as about key international issues including aid, debt and trade.

It also raises important questions about our very conception and understanding of poverty. It is true that perspectives on poverty have evolved significantly over this period, with widespread acceptance of the multidimensional nature of poverty, and of the importance of considering the depth and severity of poverty. But there has been slower progress in recognising and responding to the persistence of much poverty over time (Clark and Hulme, 2005); in other words, the phenomenon of *chronic poverty*. For many people poverty is a situation from which it is very difficult to escape, most emphatically illustrated by deprivation which is transmitted from one generation to the next. At present, chronic poverty is still not seen as an important policy focus. This is an important area of neglect both because a substantial proportion of poverty is likely to be chronic (CPRC, 2004), and because it is likely to call for distinct policy responses.

^{*} We gratefully acknowledge very helpful comments on an earlier draft from David Clark and Karen Moore. However, the usual disclaimer applies.

[†] University of Manchester and Chronic Poverty Research Centre; email: david.hulme@man.ac.uk

[‡] University of Bath and Chronic Poverty Research Centre; email: a.mckay@bath.ac.uk

In addition, existing work on chronic poverty, and poverty dynamics in general, has so far been conceptualised in very narrow terms, and this has created important limitations in our understanding. In particular, chronic poverty has been studied predominantly in relation to income or consumption poverty, and using household panel survey data. Further, much of the focus has been on the identification of chronic poverty and finding correlates, without developing an understanding of the underlying processes by which some people are trapped in persistent poverty while others escape. A broader multidimensional – and multidisciplinary – perspective needs to be brought to the understanding of chronic poverty.

This paper argues for a much stronger focus on chronic poverty in analysis and policy debate, but also that this needs to be based on a broader concept. The argument is set out as follows. The next section discusses current approaches to the analysis of chronic poverty and poverty dynamics, leading into a discussion about the limitations of monetary measures. The following two sections discuss two alternative approaches, one based on assets, and the other on concepts of needs or human development. This leads into a discussion of progress to date in terms of implementing some of these approaches at the micro level. The final section synthesises interim conclusions.

Analysing Chronic Poverty

Historically, the idea that some people are trapped in poverty while others have spells in poverty was a central element of analysis. For example, officials and social commentators in eighteenth century France distinguished between the *pauvre* and the *indigent*. The former experienced seasonal poverty when crops failed or demand for casual agricultural labour was low. The latter were permanently poor because of ill health (physical and mental), accident, age or alcoholism. The central aim of policy was to support the *pauvre* in ways that would stop them from becoming *indigent*.

In contemporary times this durational aspect of poverty has been relatively neglected and conceptual development, and more particularly measurement, has focused on severity/depth and multidimensionality.¹ This has been especially the case in economics where serious work on duration only began to emerge in the late 1980s (Bane and Ellwood 1986; Gaiha 1988 and 1989). An implicit assumption of much research was that the persistence of poverty at the individual and household level was highly correlated with the severity of poverty. During

the early 1990s such work began to proliferate based on available panel data sets, and in 2000 the first collection of papers on this topic was published (Baulch and Hoddinott 2000).

There are three important points to note about the contemporary literature (see Clark and Hulme 2005 for a fuller discussion). First, it is dominated by economists and econometricians using panel datasets to distinguish chronic poverty from transient or transitory poverty and identify variables that correlate with mobility, or lack of mobility.² Second, virtually all of the empirical work economists and econometricians have conducted uses income or consumption measures of poverty as its main variable.³ Third, these variables were almost entirely quantitative and findings were, at best, only partially contextualised. Examples of the use of combined quantitative and qualitative work have only very recently begun to emerge (Adato et al., 2005; Howe and McKay, 2004; Kabeer, 2005; Lawson, McKay and Okidi, forthcoming).

There are a number of reasons why the study of chronic poverty in developing countries has followed this path. Here we can only briefly identify them. Most obvious is that the approaches and methods used to analyse chronic and transient poverty in OECD countries, and especially the USA, have been transferred to the panel datasets that belatedly emerged in developing countries. In effect, '[t]he technically sophisticated econometric analysis that forms the basis of the poverty research industry today...' in the USA colonised work on poorer countries (O'Connor 2001: 3). Second much contemporary empirical economics places a strong focus on quantitative analysis, and adopts a perspective of methodological individualism, rather than work on collectivities such as classes or social groups. In Europe, where the other social sciences are rarely positivist and quantitative, this meant that chronic poverty analysis was seen as the domain of economists and not as a topic for cross-disciplinary efforts. Third, there remained ambivalence within sociology, anthropology, political science and geography (SAPG) about the concept of poverty. Research most often focused on inequality because of doubts about the idea of an objective poverty line and a belief that it is unequal social and political relations that underpin deprivation and social problems⁴ (see Green and Hulme, 2005, for a more detailed discussion). Even when exemplary studies were produced – such as Iliffe's (1987) *The African Poor: A History* which contrasted structural and conjunctural poverty – this did not lead to further conceptual development or a set of comparative empirical studies. Other social scientists lauded this work but did not systematically extend it.

This situation left a void in policy oriented poverty analysis that was increasingly filled in the 1990s by participatory poverty assessments (PPAs) and participatory methods as exemplified in *Voices of the Poor* (Narayan et al., 2000). These approaches need to be carefully distinguished from the concepts and methods that SAPG researchers utilise. Indeed, they are criticised by some SAPG researchers (Mosse 1994; Cooke and Kothari 2001) for generating biased accounts of ‘who’ is poor and ‘why’ people are poor.

In summary, the prevailing approach in relation to chronic poverty remains dominated by monetary indicators derived from household panel data sets. We now consider the limitations of this approach in more detail, before considering the scope to develop a broader approach in the rest of this paper.

The limitations of monetary measures

A major reason why income- or consumption-based measures of wellbeing are insufficient for considering wellbeing or poverty is that these indicators relate to the means to achieve ultimate ends rather than the ends in themselves. Such ultimate ends can be conceptualised in terms of Sen’s capabilities framework (Sen, 1985, 1990), later extended to distinguish instrumental and intrinsic freedoms (Sen, 1999). The capabilities framework moves beyond a focus on consumption commodities to emphasise the characteristics of these commodities (Lancaster, Gorman) and the functionings that these commodities – along with other factors such as the environment – enable individuals to achieve. Examples of key functionings may include the ability to avoid preventable premature mortality or an ability to live with dignity in the community.

The key issue is that individuals differ in their ability to convert commodities and their associated characteristics into the achievement of functionings due to personal, social and environmental factors. Human functioning also depends on public provision of key services, the value of which is typically not included (and anyway conceptually and practically difficult to value) in monetary measures of wellbeing. Solely emphasizing the income or commodities an individual can command is insufficiently focussed on the ultimate ends of well-being. While in practice micro data suggest that income and the achievement of most ultimate ends tend to be positively correlated with each other across individuals or households, such correlations tend to be modest (Appleton and Song, 1999). Thus for a given

income level there can be a wide variation in non-monetary welfare outcomes. In addition, an increasing literature finds only a weak correlation between income and measures of happiness in comparisons across and within countries (Stutzer, 2003; Frey and Stutzer, 2001), although it has also been argued by some capability theorists that there is an equally weak association between happiness and well-being.

Another important and widely stressed issue in relation to income or consumption measures is that these will almost invariably (for practical reasons) be measured at the household level and so not capture intra-household variations, which can be substantial (Kabeer 1991; Haddad and Kanbur, 1990). In looking at welfare issues the appropriate focus is clearly at the individual level, but it is very difficult to measure individual income or consumption due to factors such as shared income and purchases, or joint consumption, within the household. This also invites an alternative approach.

Aside from these conceptual issues, income or consumption measures of well-being typically show large fluctuations over time, and this is often especially significant for the poorest. Indeed, these fluctuations, and the vulnerability they imply, are a key aspect of ill-being. Many non-monetary indicators, such as adult literacy, are much less subject to fluctuations. Thus monetary indicators (even consumption, which is generally preferred over income) more than almost any others fail to provide an adequate measure of long term well-being status when measured at just one point in time, based on a one-off survey or even on repeated cross sections. This is likely to be particularly the case for the poorest for whom consumption smoothing is most difficult. For this reason panel data offers the promise of looking at longer term dynamics when using income or consumption measures. Thus in Uganda there was a large reduction in consumption poverty over the 1990s from 55.7% in 1992 to 35.2% in 1999; but these figures fail to capture the substantial mobility over this period revealed by panel data where many households fell into income poverty while at the same time many others escaped (Lawson, McKay and Okidi, 2003, p.7).

Aside from the conceptual weaknesses already articulated, there are a number of practical issues in using longitudinal income or consumption data to look at poverty dynamics. One is that the number of waves in panel data is typically small, frequently just two or three periods with significant time gaps in between. A second issue is the extent of attrition which typically affects panel data sets, with households dropping out (e.g. due to mobility, or refusal

to be re-interviewed), a phenomenon which is likely to show systematic patterns (Alderman et al., 2000; Falaris, 2002). Related to this, inevitable changes over time in household composition mean that it is not always easy to identify panel households unambiguously.

Another important limitation is the extent of measurement error typically associated with measuring income or consumption. These are complex variables to measure given the variety of different types of consumption or sources of income; there will inevitably be significant recall error; and measurement methods to increase accuracy (e.g. using short recall methods) also introduce increased volatility into the data (Scott, 1992). These issues are less serious when looking at averages (e.g. patterns of poverty) across groups of households, but can be substantial at the individual household level – the level at which poverty dynamics must be considered. It follows that household level income or consumption data in panel surveys display greater volatility over time than is really the case, due to the impact of measurement error. This will mean that mobility will be exaggerated and chronic poverty is likely to be underestimated. While some studies have attempted to correct for measurement error (Dercon and Krishnan, McCulloch and Baulch), such corrections are inevitably imperfect because of the lack of information to form a firm judgement about the extent of measurement error.

In addition, as already noted, the ways in which panel data have been used in analysis have generally been limited to the measurement of chronic and transitory poverty and the identification of correlates of poverty transitions or non-transitions (being trapped in poverty). Typically the range of correlates considered has been quite limited, reflecting the range of information typically collected by surveys. The correlates identified are generally plausible (McKay and Lawson, 2003) but cannot provide insights about causes. In general what is required is to develop an understanding of the processes underlying poverty transitions (or traps) and household surveys are generally not well adapted to provide such insights. This is partly a limitation of a purely quantitative analysis, and this has been recognised in the recent development of combined qualitative and quantitative approaches. For the most part though these still remain strongly focused on money-metric poverty.

There is scope to analyse dynamics of important non-income indicators using panel data sets - for example, whether children are enrolled at school, or anthropometric indicators. While anthropometric data in particular could offer a major opportunity, in practice this is often not

possible in practice because of the common habit of only collecting data on a very limited age range, typically pre-school children.⁵. But it is also important to raise questions about alternatives to panel data. On a very practical level, in the large majority of low income countries panel data are not available – but the issue of chronic poverty remains important. The question of alternatives is also important because of the significant cost and also difficulty of collecting panel data (e.g. tracking and matching individuals and households, (Wilson and Huttley, 2003; Rosenzweig); is collecting panel data worth the cost it implies, or are there other adequate ways of analysing chronic poverty? One potential opportunity could be offered by pseudo-panel methods (Bourguignon et al, 2004, looking at vulnerability), but such methods typically require large sample sizes. Gibson (2001) claimed to develop a method for transitory and chronic poverty without a panel, but in fact his approach is about more accurate measurement of poverty and not about poverty dynamics.

There are many points that might be drawn from the above discussion. The main one, from the perspective of this paper, is that to date the creation of knowledge about chronic poverty remains highly dependent on the work of economists and econometricians. This is much more the case for chronic poverty than it is for poverty in general terms. This leads to two arguments that inform the rest of this paper. The first is that the conceptualisation and operationalisation of chronic poverty, currently largely shaped by economists, needs to be as rigorous as it can be – otherwise the overall understanding of poverty dynamics may be distorted. The second is the need to look for ways of ensuring that chronic poverty is not analysed through an excessively narrow lens. Can concepts from other disciplines be incorporated into chronic poverty analysis by economists, and/or can cross-disciplinary or combined quantitative and qualitative approaches be developed? We consider now a range of potential alternative approaches.

What are the Alternatives? Part 1: An Asset-Based Approach

Many of the limitations of monetary measures are quite widely accepted, but a key difficulty has often been to identify alternative approaches which retain a strong focus on chronic poverty or poverty dynamics. One important potential alternative approach is to focus on asset ownership, given that assets capture longer term dynamics much better than a measure of income at one or two points in time. For this reason having longitudinal data may be less

crucial. In addition, assets can in principle be considered in a range of different dimensions, including social capital.

An asset-based approach: static and dynamic thresholds

The assets that a household possesses, or to which it has access, can be related to household income in that the latter may be conceptualised as returns to these assets. In this view a household's income reflects the assets it commands and the returns it is able to earn on these assets, which in turn depend on many factors. But such assets are also likely to be important to households in their own right, besides their role in generating income; as well as representing wealth and status, having a sufficient level of assets also offers security, such that households can insure themselves against shocks, and easier access to credit. Ownership of key assets may be a good indicator of well-being in its own right (although any evidence for this has typically been judged in relation to income or consumption indicators). Relative to income or consumption, assets are likely to be much less subject to fluctuations in the short to medium term, compared to income or consumption. An important issue to consider, however, is which assets should be included in any asset-based measure of well-being.

An important example of placing assets in a central role in the analysis of persistent poverty is the work of Michael Carter and associates (Carter and Barrett, 2005; Carter and May, 2001). This moves beyond a distinction between chronic and transitory (income) poverty, to introduce asset poverty and distinguish between structural and stochastic poverty. Consider a transitorily poor household that is poor in the first period but above the poverty line in the second period. This may reflect structural change, because for example the household has been able to accumulate assets over this period. Alternatively it may reflect stochastic factors: the fact that the household was poor (non-poor) in the first (second period) may just have been a reflection of bad (good) luck in that specific period. This distinction can be made by considering the assets owned by the household and asking (based on a relationship between income and assets) whether *on average* that level of assets is sufficient to place a household above the poverty line. Thus it is possible to identify an asset poverty line corresponding to a given income poverty line based on an average relationship between income and assets. In this way it is possible to distinguish among the income poor (non-poor) between those for whom this situation appears to be temporary because they have (do not have) a sufficiently high level of assets, and those for whom this seems to be permanent.

This enables a more sophisticated understanding of the poor/non-poor distinction, contingent on the relationship between income and assets.

Building on ideas of poverty traps and multiple livelihood strategies, Carter and Barrett (2005) extend this concept to identify a dynamic asset threshold, taking account of households' ability to save or have access to credit. In their model (with two livelihood strategies) the dynamic asset threshold is the level above which households will save and accumulate assets (keeping them above the poverty line), and below which they will reduce their asset holdings and find themselves in a situation of poverty over the longer term. The challenge of course is to estimate this dynamic asset poverty threshold. As part of this a key issue to consider is which assets should be considered and how diverse categories of assets can be aggregated. There are various solutions to this latter question; for instance, Sahn and Stifel (2000) have used factor analysis to construct a one dimensional household asset index, though this technique does not take account of the relative importance of different assets in generating income.

This focus on assets adds considerably to the distinction between chronic and transitory poverty based on income data alone, but income still plays a central role in this approach; both static and dynamic asset thresholds are still defined in relation to income poverty lines. It has also focused to date on a relatively narrow range of productive assets, and it does not provide much discussion of the factors affecting the returns to these assets. Is there scope to consider assets in their own right as indicators of chronic poverty status?

Assets in a Livelihoods Framework

The livelihoods approach (Carney, 1998; DFID, 1999-2000; Scoones, 1998; Ellis 2000) is now used extensively in poverty analysis. In its orthodox form it recognises five 'capitals' that capture the assets that households utilise to generate consumption and accumulate (or liquidate) for future use. These are natural capital, physical capital, human capital, social capital and financial capital. Hulme et al (2001; see also Moore 2001) adapt this by dividing social capital into socio-cultural and socio-political assets and by proposing other potential categories (security and psychological).

Potentially, this framework could be utilised to estimate the total asset set that a household controls. A hypothetical example of this is developed by Johnson, Hulme and Ruthven

(2005). However, operationally the livelihoods framework falls back on less comprehensive devices to assess the level of poverty or wealth of households. Ellis (2000) points to the conventional economic devices of income and consumption and makes a strong case for consumption measures to be preferred. The example he provides in his book, however, recommends the use of participatory wealth rankings to assess who is poor, and these fall back on a small number of natural and physical assets (presumably because these are the easiest to identify and measure in practice): ownership of land, cattle, housing quality and a number of context specific key physical assets (ibid; 206-7).⁶ Varying mixes of these natural and physical assets are used to 'designate' whether a household is presently 'low income', 'middle income' or 'high income'. Low income households are assumed to be poor. The logic behind this is not presented, but it would appear to be that low levels of these key assets reveal directly that the household has low levels of natural and physical capital and indirectly that there are also low levels of financial, human and social capital. In effect, the last three capitals are assumed to closely correlate with the levels of the key assets.

While the livelihood framework appears to have the potential to allow a comprehensive assessment of assets, in practice this seems either difficult to utilise (because of the problems in measuring or placing values on financial, human and social capital) or unnecessary (as the assets that can be easily measured serve as surrogate measures for the others). The latter, however, remains an empirical issue to be demonstrated. Clearly this is not the end of the story and researchers should be encouraged to attempt comprehensive operationalisations of the framework.

What are the alternatives? Part 2: Needs and Human Development Approaches

Needs approaches

Asset-based approaches to identifying and measuring poverty and deprivation have also been heavily criticised, for instance, because of the limited range of assets, because of difficulties of measurement, and because they are insufficiently linked to ultimate ends. An early alternative to this was the basic needs approach originally developed by the ILO in the 1970s (with a focus on goods and services), and revamped in the early 1980s by Paul Streeten et al (1981), and Frances Stewart (1985) and associates (with a focus on outcomes) (see Stewart, forthcoming). This was in recognition of the fact that economic growth was frequently not associated with improvements in key education and health outcomes. However, basic needs

approaches have also been criticised for seeing poverty reduction as essentially about access to goods and services, as well as for the universalist nature of its focus. While this criticism is appropriate of the early version developed by the ILO in the 1970s, it is not applicable to more recent variants of the needs approach (see Alkire, 2002b; Clark, forthcoming, Stewart, forthcoming).

Later work by Doyal and Gough (1991) sets out a much more comprehensive needs-based perspective. As with the basic needs approach, they argue strongly for the importance of recognising fully universal needs and they reject arguments based on cultural relativism that purport to challenge this. Doyal and Gough identify health and autonomy as the two key basic needs that,

“[all] *humans must satisfy in order to avoid the serious harm of fundamentally impaired participation in their form of life...*” (Gough, 2004)

Individual autonomy of agency depends on three key variables (Gough, 2004)

- Cognitive and emotional capacity
- The level of cultural understanding an individual has about themselves; and
- Critical autonomy: “the capacity to compare cultural rules, to reflect upon the rules of one’s own culture, to work with others to change them and, *in extremis*, to move to another culture” (Doyal and Gough, 1991, p. 187).

These basic needs are universal but the means of satisfying them (the basic needs *satisfiers*) can be culturally specific. But Doyal and Gough seek to identify universal satisfier characteristics - characteristics of goods, services, activities or relationships which enhance physical health or autonomy in all cultural contexts, by identifying a set of 11 intermediate needs (Table 1). This list, they argue, is drawn up based on codified and experiential knowledge. How these intermediate needs are satisfied, however, still depends on the social context.

In practice there remains a major challenge in how to identify indicators for these basic and intermediate needs. Another major criticism which has been levelled at this approach is its paternalistic approach.

Table 1: Doyal and Gough's 11 Intermediate Needs

Nutritional food and clean water
Protective housing
A non-hazardous work environment
A non-hazardous physical environment
Safe birth control and child-bearing
Appropriate health care
A secure childhood
Significant primary relationships
Physical security
Economic security
Appropriate education

Source: Gough (2004).

Human development and related approaches

Another approach has been developed by a prominent group of philosophers and social scientists, such as Amartya Sen (1984; 1985; 1999), Mahbub ul Haq (1995) and Martha Nussbaum (1988; 1995; 2000), which can be loosely grouped under the heading of human development.⁷

Alkire (2002) identifies 15 of these, Saith (2001) reviews 6 and Clark (2002, ch.3) provides an overview of over 15 lists. While there are many differences, and sometimes disagreements, between these approaches a number of common features (many of which they share with the Needs approaches discussed above) can be observed.

- (i) Their focus is on the achievement of ultimate ends, often envisioned as 'human development' or 'well-being', rather than on the means to achieve ends.
- (ii) They are much more multi-dimensional than asset-based approaches, usually recognising at least 6 dimensions of human development and in some cases more than a dozen (and often dimensions are divided into several distinct sub-dimensions and different indicators may be used to assess these).
- (iii) They temper the materialism of flow and asset-based approaches through a focus on non-material aspects of human development such as affection, friendship, autonomy and security (the last though is sometimes defined, at least in part, in material terms).
- (iv) To varying degrees⁸, they allow for participatory processes in the identification and specification of the dimensions of poverty so that different cultures, or the preferences of poor people, influence the lists that are produced.

- (v) Concepts and methods from moral philosophy and ethics are used extensively and economics often plays only a secondary role.

While such ‘lists’ make great efforts to present a conceptually coherent account of human well-being and/or the ‘good life’, they all aspire to making some practical contribution to identifying, measuring and understanding poverty and low levels of well being, so that more effective action can be undertaken. In terms of the identification, measurement and analysis of chronic poverty one can argue that all of them have failed to have a significant impact. They have pointed out the severe limitations of commodity-based approaches but have not managed to generate an operational alternative for empirical studies specifically in relation to chronic poverty. There have been many attempts to make the capability approach operational, but here are very few attempts to introduce time dimensions into the capabilities approach (though see Clark and Hulme, 2005). Possibly as well is may be necessary to develop a broader view of chronic poverty.

Why have they failed to make more headway? According to Alkire (2002:193) a synthesis has not emerged from this work for three main reasons.

- (i) They are biased to Western sources. Very few similar lists from scholars in developing countries have been collected.
- (ii) The mechanisms for ‘empirical testing’ and/or ‘participatory processes’ are unclear.
- (iii) The items on the lists ‘vary slightly’.

Philosophically there may be strong grounds for resisting a synthesis that inevitably compromises the internal logic of each individual approach to some degree. Practically, however, there are dire consequences: the analysis of chronic poverty and poverty dynamics remains dominated by ‘commodity fetishists’ or by researchers who simply ‘do what everyone else is doing’.

It is not possible here to examine all of the human development frameworks that might be operationalised. Here we focus on the work of two leaders in this field (leaders in that these are the two people whose work is most often revered by peers) – Amartya Sen and Martha Nussbaum. .

While Sen's capabilities framework has much to recommend it, there are at least three significant problems. First, the focus on a very broad range of capabilities may be appropriate when thinking of well being and flourishing, but in poverty studies it may be better to focus on a smaller sub-set of 'basic capabilities' (Stewart quoted in Alkire, 2002:184). Secondly, while there are strong grounds for arguing for pluralist and/or participatory strategies to identify capabilities (Alkire, 2002b; Clark, 2002, etc), this makes empirical work time consuming and expensive and may make cross-community, cross-national and longitudinal analysis infeasible. Thirdly, there are questions about whether commodities and capabilities are mutually separable (Clark, 2002: Ch 2; forthcoming), leading to questions about whether commodities need to be a component of a capability approach (as for the HDI).

Nussbaum has attempted to progress the idea of capabilities by specifying a set of 'central human capabilities'. These have 'value in themselves' and attempt to define(?) '... central elements of ...' what? (Alkire 2002:187). Her list is not definitive and can, according to the author, be revised (Table 2) This list overlaps with Doyal and Gough's basic and intermediate needs but there are also significant differences (Gough, 2004, sets out a comparison between these two approaches).

Table 2: Nussbaum's Central Human Capabilities

Life
Bodily health
Bodily integrity
Senses, thought, imagination
Emotions
Practical reason
Affiliation
Other species
Play
Control over one's environment

Her work has received considerable support, but can be criticised for being Eurocentric and/or paternalistic (e.g. Stewart, 2002). Practically it can be criticised for having failed to achieve widespread empirical adoption.

But the opportunity to operationalise human capabilities approaches remains open. Here we illustrate possible ways of applying these theories for empirical work. The challenge now is to move beyond using capabilities frameworks to criticise income/consumption and asset measures, and to generate alternatives that can challenge or displace these.

The scope to implement non-money metric alternatives

As discussed above, a number of attempts have been made to implement asset-based approaches to poverty (and chronic poverty) measurement. However, these have typically been based on a relatively narrow range of assets (typically physical and natural, and sometimes human capital) as in the construction of asset indices or the implementation of livelihoods frameworks; and/or have been strongly linked to income poverty in any case (as in the work of Carter and Barrett). These approaches are typically limited to forms of assets that are in some sense measurable, and asset indices have frequently been criticised because of the relatively arbitrary – and non-context specific – weightings that they employ. An analogous criticism of course is levelled at the Human Development Index.

Here we consider some alternative approaches that have been implemented.

Klasen's Deprivation Measure

Stephan Klasen has pointed to the shortcomings of moneymetric measures of poverty and deprivation and experimented with a ‘...deprivation index [that] examines capability outcomes directly’ (Klasen, 1997; 2000: 57). Here our focus is on the deprivation measure itself and not on empirical comparisons of the deprivation and expenditure poverty measures. Klasen refers extensively to Sen’s work as the conceptual inspiration for his measure, which assesses deprivation in terms of 14 ‘components’ of well-being (Table X Klasen p 40). This is not an attempt ‘...to propose the definitive measure of well-being, but simply to contribute to a debate about possible ways to capture well-being more directly than relying on expenditures...’ (ibid: 43).

This measure has clear advantages over the monetary measure for assessing chronic poverty as: (i) it focuses on capabilities rather than means, (ii) it does not assume perfect markets, (iii)

it bypasses many of the problems associated with aggregation and equivalence scales, and (iv) it is less sensitive to measurement error. However, it is not unproblematic. In particular it can be challenged in terms of its choice of components, its scoring system and the weighting of components in the index, as Klasen (ibid: 36) recognises (though he argues some of these things are likely to be uncontroversial).

Clark and Qizilbash (2005) point out that Klasen does not clearly explain the choice of components. Essentially, they appear to be selected pragmatically from all of the possible SALDRU⁹ indicators that relate to capabilities. Arguably, only 11 of the components selected can be directly related to capabilities. Two are commodities – income and wealth – and one, perceived well-being, is a measure of utility. So, conceptually, the measure can be challenged for mixing indicators of capabilities with commodities and utility. However, Klasen also constructs a ‘core deprivation index’ of seven components concentrating on ‘...the most basic human capabilities’ (see Table 3). This simpler measure has the conceptual advantage of not including commodities or utility as components. Practically, it has the advantage of requiring less data – so it is more likely to be of use for spatial or temporal comparisons. It also has the advantage of using variables which are easier to measure. Empirically, it produces results that are very similar to the fuller index.

Table 3: Components of a Composite Measure of Deprivation (Klasen)

Component	Description of indicator used
Education ¹	Average years of schooling of all adult (16+) household members
*Income	Expenditure quintiles (as used throughout paper)
*Wealth	Number of household durables (list includes vehicles, phone, radio, TV, geyser, stoves, kettle, bicycles)
*Housing ¹	Housing characteristics
*Water ¹	Type of water access
Sanitation	Type of sanitation facilities
Energy	Main source of energy for cooking
*Employment ¹	Share of adult members of households employed
Transport	Type of transport used to get to work
Financial Services	Ratio of monthly debt service to total debt stock*
Nutrition ¹	Share of children situated in household
Health Care ¹	Use of health facilities during last illness
Safety ¹	Perception of safety inside (i) and outside (o) of house, compared to 5 years ago
Perceived Well-being	Level of satisfaction of household

*Households with missing values in these indicators were assigned a value based on their race, location (rural/urban/metro), and expenditure quintile.

¹ These seven components are used for the 'core deprivation index'.

Source: Klasen (2000, p. 40).

The second major criticism is of the cardinal scoring system used for each indicator. While Klasen argues that '...in most cases...the scoring system is quite intuitive and unlikely to stir much debate' (ibid: 39), Clark and Qizilbash do query the arbitrariness of this and there are quite obvious challenges that might be made. For example, why should a non-poor individual who has a luxury flat close to his work and the privilege of walking to work each morning (despite owning two cars) be classed as most deprived in terms of transport/mobility? Similarly, why should a domestic servant living in almost slave-like conditions be assessed as least deprived in terms of housing when she sleeps on the kitchen floor in her employer's house? In addition, the way in which these scores operate means that the measure is of relative and not absolute deprivation.

Third, there is the inevitable questioning of the weighting of components in the index. While giving all components the same weight might appear to be 'fair', there is a complex set of value judgements built into such an assumption. For example, can nutrition (child stunting that may reduce an individual's capabilities over her lifecourse) be weighted the same as transport/mobility (where a low score may be a temporary inconvenience)?

There is a final challenge that Klasen does not mention: that this approach is paternalistic, in that it does not allow respondents to say what well-being, or more accurately lack of well-being, means for them. Although the PSLSD asked about perceived levels of well-being, and about what the state should prioritise, though it did not directly ask interviewees to define deprivation in their own terms.

Despite these problems Klasen's index, or something similar, would appear to offer strong advantages over the income/consumption/expenditure approaches that have dominated chronic poverty analysis in South Africa and elsewhere. They may focus on relative deprivation – but in countries with large numbers of poor people such as South Africa, those who are relatively deprived in terms of capabilities are likely to be in absolute poverty.

Clark and Qizilbash's Core Poverty

Over recent years Mozaffar Qizilbash (2000; 2003; 2005) has been exploring approaches that explicitly deal with the vagueness of what poverty is, and of how boundaries distinguishing the poor from the non-poor might be specified. These ideas have been empirically operationalised with David Clark in an approach that is strongly linked to capabilities and especially Sen's work (Clark and Qizilbash, 2002; 2005). Their approach seeks to deal with the 'horizontal vagueness' of the dimensions of poverty and the 'vertical vagueness' of the minimal critical levels (for given dimensions) at or below which someone must fall to be classed as poor (Qizilbash, 2003, p.50).

Following Fine's 'supervaluationist' approach (Qizilbash, 2003) they develop a method that can identify admissible specifications for poverty. A statement about poverty is 'super true' only if it is true in all admissible ways of making it more precise. They refer to someone who is poor in this sense as 'core poor', meaning that they are unambiguously poor. To be core poor, a person must be poor in any single core dimension of poverty (i.e. one that is part of all admissible specifications for poverty) and must fall at or below the lowest critical level in

that dimension. Other people who are ambiguously poor in a core dimension (i.e. poor in terms of at least one but not all admissible specifications of the corresponding poverty threshold), are classed as 'vulnerable'. In this usage, '...vulnerability relates to the possibility of being classified as poor, rather than any risk of becoming poor' (Qizilbash, 2003, p.52). It is important to note that this approach does not aggregate scores in different dimensions. If a person is below the critical minimum level in a core dimension s/he is unambiguously poor regardless of their scores in all other dimensions.

Clark and Qizilbash (2002; 2005) have applied this approach by asking a randomly selected sample of 'ordinary people' from disadvantaged regions in South Africa about '...which needs and capabilities ...are basic, and where they draw the line between the poor and non-poor' (ibid: 9). The focus is on 'the essentials of life' rather than broader living conditions. Their interviewers administered a questionnaire that '...asked people about the level of achievement required to 'get by' as opposed to that to 'live well'' (ibid: 10). Interviewees were asked open ended questions about what they regarded as essential to 'get by' in their context and later were asked about a set of pre-defined human needs or capabilities.

A method was required to identify which of the dimensions specified by interviewees were 'core', and what counts as critical minimal levels. A natural criterion for a dimension to class as core poverty would be 100% endorsement by all 941 respondents, however no dimension received such a complete endorsement and 'it is sensible to allow for some margin of error in the interviewing process and to allow for at least a tiny proportion of answers which can be excluded' (ibid: 13). Consequently Clark and Qizilbash select a 'relaxed 95% rule' i.e. any dimension of the essentials of life that is endorsed by 95% of respondents (ibid: 15). Correspondingly, a relaxed 5% rule is used to identify the critical minimum level of a dimension i.e. the level at which a person is held to be unambiguously poor is that level at which just less than 5% of interviewees say a person is definitely poor.

Table 4: Ordinal Ranking of the Top 30 Essentials of Life in three impoverished communities in South Africa (Clark and Qizilbash)

1 Housing/Shelter	16 Land and Livestock
2 Food	16 Own business/Enterprise
3 Water	16 Religion
4 Work/Jobs	19 Furniture
5 Money/Income	20 Happiness and Peace of Mind
6 Clothes	21 Community Development
7 Education/Schools	22 Love
8 Health/Health Care	23 Freedom/Independence
9 Electricity/Energy	24 Better Life
10 Safety and Security	24 Oxygen
11 Transport/Car	24 Respect
12 Family and Friends	27 Blankets
13 Sanitation	27 Heat/Temperature
14 Infrastructure	29 Sexuality
15 Leisure/Leisure Facilities	29 Sunlight

Source: Clark and Qizilbash (2005: 32)

This exercise suggests a large number of admissible dimensions of poverty (Table 4; Clark and Qizilbash, 2005, p. 32) of which 12 are core dimensions (i.e. 95% of people identified these dimensions in their responses to open ended questions). In the later parts of the paper the data from the nationally representative 1993 PSLSD survey of South Africa are analysed in terms of these core dimensions and minimum critical levels. Fascinatingly, all seven components of Klasen's (2000: 43) 'core deprivation index [of] the most basic capabilities' are included in this list of 12 'core dimensions'.

What would such an approach mean for the identification, measurement and analysis of chronic poverty? Potentially, it offers a number of advantages. The method means that the selection of the capabilities/components/dimensions that are sufficient to 'get by' (avoid poverty), can be held to be legitimate not because of 'intuition' (Klasen) or authoritative judgement (Barrientos, see below), but because impoverished communities have specified them. The argument for the setting of the minimum level has a similar legitimacy. In addition, the procedure used can avoid challenges of paternalism as the people who experience poverty, or live alongside those who do, are selecting the measures and criteria that are to be used. A final advantage of this approach is that it does not require the construction of an index or the computation of adult equivalence. Challenges about the scoring and weighting of components do not arise.

Inevitably, there are potential disadvantages with this approach. The first, and perhaps most obvious, relates to the justification of the 95% and 5% rules – why not 99% or 90%...why

not 1% or 10%? Clark and Qizilbash though argue that their rule is robust. The setting of these rules can be argued to be arbitrary – the method deals with vagueness by making a vague assumption. In fairness to Clark and Qizilbash, the selection of these cut off points is discussed in detail, but still these end up as judgements rather than unambiguous criteria.

A second challenge relates to the issue of not aggregating data. According to this approach it would be possible for someone who is just above the critical minimum level in all dimensions to be classed as vulnerable (ie not unambiguously poor) despite their desperate circumstances. Someone else who is non-poor and/or wealthy in all dimensions except work/jobs (because they lost their job yesterday/recently) would be classed as core poor. Can this be justified?

A third problem is that this approach probably could not be utilised in comparative work. As it is likely that people in different countries, or even in different parts of a country, would come up with different sets of dimensions and different minimum levels for unambiguous poverty, could these measures ever be used for cross country comparisons? It is also not likely to be applicable in longitudinal studies – the key approach for analysing poverty dynamics. If the full method is applied each time a panel dataset is to be analysed, should the analyst apply the criteria (dimensions and levels) from the original survey or should a new exercise be conducted? If one opts for the former, one is imposing an old value set on the people interviewed, and not permitting them to revise their values over time. If one opts for the latter, then the criteria are likely to change, making it difficult to track the dynamics of poverty? This issue would need clarification.

Finally, there is the issue of the additional costs that this approach would impose on poverty analysis. At the very least it would require an additional survey to be undertaken in each country (or region of a country) to derive the dimensions and levels that ‘ordinary people’ feel are important. This is not a vast amount, but it is likely to mean additional costs of \$100,000 to \$200,000 in most countries. It might of course be included in standard existing household surveys, but does represent a significant change in methodology.

Clark and Hulme (2005) have conceptually outlined a means by which Clark and Qizilbash’s core poverty framework might be integrated with chronic poverty. However, this has already been challenged by Qizilbash (2005, note 9) and their approach has not been empirically tested as yet.

Barrientos's Measure of Multidimensional deprivation

The third example is Barrientos's (2003) construction of a multidimensional measure of deprivation to assess the impacts of non-contributory pensions on older people in Brazil and South Africa. His focus is '...on developing basic tools of multidimensional analysis of well being, and demonstrating that these can be effective in the evaluation of public policy'. He makes it clear that he has concerns about the inadequacies of standard monetary measures of poverty, and that Sen, along with Doyal and Gough and Nussbaum, have provided theoretical guidance in this exercise. His approach is explicitly less ambitious than Clark and Qizilbash's as he has a policy evaluation goal and strives for simplicity.

The indicators (Table 5) he selects (and he does call these indicators rather than specifying components or dimensions and then choosing indicators) fix '...on a range of achieved functionings rather than on capabilities, as the latter involves greatly more demanding information on opportunity and choice' (ibid: 7). Deprivation is envisaged as failure in terms of certain basic functionings and these are chosen pragmatically in the light of data availability.

How the minimum levels that identify deprivation are selected is not clearly explained. These seem to have been set by personal judgements after consultations with other evaluators and older people in Brazil and South Africa. Each indicator is scored on a scale, ranging from 1 to 3 or? from 0 to 11, and a different cut-off point is specified for each (see table Z).

Aggregation at the individual level is computed by simple addition/counting, so that each person has a deprivation score out of 10. A score of zero indicates that a person is experiencing no deprivations, while a score of 10 indicates that someone is experiencing deprivation in all of the assessed dimensions. Barrientos is fully aware of the implications of equally weighting all dimensions in this way – 'aggregating the different indicators into a single measure of deprivation involves strong ethical implications, and it is important to bring these out...this amounts to assuming perfect substitution across deprivations' (ibid: 9).

Table 5: Wellbeing Indicators (Barrientos)

Label	Description	Values	Deprivation
Health	Self-reported health status	1 very poor 2 poor 3 average 4 good 5 very good	1
Life satisfaction	Self-reported assessment “Taking everything into account, how satisfied is this household with the way it lives these days?”	1 very dissatisfied 2 dissatisfied 3 neither satisfied not dissatisfied 4 satisfied 5 very satisfied	1,2
Safety	Change in perception of safety from two years before	1 worse 2 same 3 better	1
Social participation	Number of social organisations the respondent belongs to	0-8 (Brazil) and 0-10 (South Africa). Brazil: senior centre, church group, community organisation, sports club, school organisation, political party, trade union. South Africa as Brazil plus: women’s club, stokvel, burial society.	0
Political participation	Number of citizen actions	0-4 (participation in community meeting, or general meeting, complaints to authorities, work for political candidate)	0
Financial control	Responses to the question: “How much of own money are you able to keep for yourself?”	1 none 2 very little 3 some 4 a reasonable amount 5 all	1
Debt service	Monthly debt repayments as proportion of total debt	1 if $x \geq 0.5$; 2 if $0.5 > x \geq 0.2$; 3 if $0.2 > x \geq 0.1$; 4 if $0.1 > x \geq 0.001$; 5 if $0.01 < x$	1,2
Durables	Number of durables in household	0-11 (phone, stove electric or gas, stove paraffin or wood, electricity, tv, radio or stereo, fridge or freezer, sewing machine, car, bicycle, motorcycle)	1-5
Water	Main source of drinking water	1 other (river,dam,rainwater) 2 borehole 3 public tap/water carrier 4 piped water on site, neighbour 5 piped water in dwelling	1
Expenditure	Quintiles of equivalised per capita household expenditure	1-5	1,2

Source: Barrientos (2003).

Barrientos sums up his approach as follows: ‘The strategy adopted here – involving the counting approach, binary indicators of deprivation, and the assumptions regarding the weights attached to different deprivations, and their relationship – delivers the simplest approach to multidimensional evaluation’ (ibid: 10). Indeed, it has great simplicity, is readily understood by policy makers and a lay public, and produces persuasive findings about the contribution that non-contributory pensions can make to the well being of older people.

As with all of these examples of operationalisation of a human development approach to poverty assessment, it is open to many challenges. The first relates to the choice of indicators. His pragmatic approach has clear policy implications but there are significant conceptual concerns about the method. While the indicators clearly derive from the literature on well being there is no explicit theoretical rationale for their selection. The measures involve functionings (e.g. health, social participation, political participation), capabilities (financial control, level of debt servicing), commodities (expenditure quintile and durables) and utility (self-reported satisfaction with life). This is more complex than the ‘basic functionings’ discussed in the methodology would suggest. Can all of these different things be put together? There are also omissions of key dimensions of deprivation that appear on many analysts’ ‘lists’. For example, the analysis of both Klasen and Clark and Qizilbash (see above) include education, housing, employment and nutrition in their basic dimensions. Why are these excluded from Barrientos’s list? For education and employment it may be that for public policy purposes for older people it is ‘too late’ for intervention, or at least perceived as such. If that is the case it would be good to know it. However, for nutrition and housing it is much more difficult to explain why these are not included in the indicators.

The second criticism is the issue of thresholds. There is no clear explanation of how these have been selected. While their levels may seem reasonable they are not unproblematic. For example, a score of zero for political participation could mean an individual has full capability in this space but has exercised their agency by deciding not to function in the political sphere. So, a zero functioning reflects a 100% capability. Similarly, why 5 or less durables should be a threshold, rather than 4 or 6, needs some explanation.

Then there is the issue of aggregation. While his method is elegantly simple it faces standard challenges. For example, can the deprivation of poor health be equated to the lack of one or

two durables? The former may be a catastrophic capability failure occasioned by weaknesses in public policy. The latter may reflect the capability of someone to function in a way that is environmentally friendly and leaves their life uncluttered.

Finally, there is the criticism of paternalism. By selecting the dimensions and indicators and choosing threshold levels has Barrientos deprived older people in Brazil and South Africa of their right to say what deprivation means for them?

As with the other examples, there are a long list of theoretical and methodological criticisms, but these need to be offset by considering the purpose of the exercise. It provides substantial evidence that non-contributory pensions can improve the well being of older people, rather than just their income or expenditure, and reduces the measurement errors that a purely monetary assessment would have introduced to the evaluation. It is highly imperfect, but still may be better than the alternative - a uni-dimensional approach!

Summary

All three of these approaches provide an indication of practical ways to operationalise human development approaches in poverty identification, measurement and analysis. All of them could be adapted to the examination of chronic poverty and poverty dynamics. They also provide insights into how many 'dimensions' might be included in a measure and of the ways in which aggregation and dominance rules would change measures.

Is there any way that these varying attempts to operationalise human development approaches might be brought together to agree to a common, practical measure that can be used over time and across countries? Ruhi Saith (2001) argues that common ground can be identified. In the six human development lists she reviews, health, nutrition and education emerge as commonly agreed capabilities (see also Clark, 2002, ch. 3). Could we proceed to an individual or household level measure of basic capability poverty based on these three?

A key problem for all of these alternatives remains how to deal with social capital. The common shortcut for economists is to conceptualise this in terms of an individual's or household's social networks. This is measurable – membership of organisations, transactions with other people – but ignores the fact that social capital is about a much broader set of

relationships (many not visible). These may be envisaged as bonding (direct connections between family members, neighbours, friends and business associates), bridging (horizontal connections between people from different ethnic or occupational backgrounds), and linking (vertical ties between less powerful people or their agents and more powerful people) forms of social capital (World Bank 2001: 128-131). This broader conceptualisation is much more demanding to operationalise, especially in terms of measurement, but does offer a device for more effectively capturing the content of key elements of this crucially important non-monetary aspect of poverty.

It must be acknowledged, however, that even this more comprehensive concept of social capital fails to capture what World Bank analysts (*ibid*: 129) describe as the ‘dark side’ of social capital – relationships, norms, networks and organisations that are ‘...working at cross-purposes to society’s collective interests (gangs, drug cartels)... that serves perverse rather than productive purposes’ (*ibid*). This may be seen as the main conceptual challenge facing analysts of poverty and particularly chronic poverty. Alternatively, the simplification of social capital may be seen as a device by which the World Bank, and many other organisations and structures, seek ‘...systematically, to obscure class relations and power...’ and to ‘...depoliticize development’ (Harriss, 2001).¹⁰

Conclusion

As our exploration has shown, monetary measures for assessing chronic poverty, and especially flow measures, are inadequate both in conceptual and practical terms. Their apparent precision masks the evidence that, at best they are rough and partial surrogates; indeed they may be quite imprecise due to measurement problems. Thus they are likely to give a false understanding of the poverty dynamics of households and populations. An asset-based approach offers a significant step forward, though still suffers from a number of substantial limitations both conceptually and practically. Needs and human development approaches identify the wider perspective that is important, but are very difficult to put into practice. Consequently, besides endorsing asset-based approaches as an interim solution, there is no clear alternative that we can recommend. But the intellectual struggle to develop alternatives must be prioritised. What conclusions can be drawn?

1. Flow-based measures of poverty are unsuitable for assessing chronic poverty, and researchers should focus on stock-based measures whenever possible. Experimentation with innovative means of charting the dynamics of assets and human capabilities is a research priority.
2. Where flow-based measures are used, much clearer cautions must be made pointing out to the reader the high probability that poverty will appear as more transient than it actually is because of fluctuations in such measures, due to stochastic factors and measurement error. (Refer to Bob's JDS paper on Pakistan as an example of such false precision?)
3. We argue that income and expenditure data remain important as part of the overall picture of assessing poverty, but need to be used in different ways and given much less primacy. For example, it may be more valuable to look at income data more in terms of composition from different sources and economic returns to different assets, rather than as the primary welfare measure in its own right. Indeed, we would argue that the contemporary emphasis on income over and above consumption in poverty analysis has been a step too far.
4. The macro-level breakthrough that has been occasioned by the widespread use of the HDI needs to be taken down to the micro-level. We know that the HDI is imperfect, but it does have well-proven advantages over GNP per capita for understanding welfare and deprivation. At the very least, we need an active debate about the feasibility of establishing a household level 'HDI' to challenge the contemporary supremacy (and use and abuse) of household income/expenditure/consumption measures.

References - incomplete

- Adato et al (2005)
- Alkire, Sabina (2002) "Dimensions of Human Development" *World Development*, 30:2, pp. 181-205.
- Alderman, H., Behrman, J., Kohler, Maluccio J, and Cotts Watkins, S., (2000), "Attrition in Longitudinal Household Survey Data: Some Tests for Three Developing-Country Samples", Policy Research Working Paper 2447, World Bank.
- Appleton, Simon and Lina Song (1999)
- Bane, M. and D. Ellwood (1986), "Slipping into and out of Poverty: The Dynamics of Spells", *Journal of Human Resources*, 21:(1), 1-23, Winter.
- Barrientos (2003)
- Baulch, Bob and John Hoddinott (2000)
- Baulch, B. and Masset, E, (2003), 'Do Monetary and Non-Monetary Indicators Tell the Same Story about Chronic Poverty? A Study of Vietnam in the 1990s', *World Development*, 31(3), 441-453.
- Bourguignon, F., Goh, C.-c., & Kim, D. I. (2004). Estimating Individual Vulnerability to Poverty with Pseudo-Panel Data. Washington DC: World Bank.
- Carney, D. (ed.) (1998), *Sustainable Rural Livelihoods: What Contribution Can We Make?*, London: Department for International Development (DFID).
- Carter and Barrett (2005)
- Carter and May (2001)
- Clark, D. A. (2002), *Visions of Development: A Study of Human Values*, Edward Elgar, Cheltenham.
- Clark, D. A. (forthcoming), 'Sen's Capability Approach and the Many Spaces of Human Well-Being', *Journal of Development Studies*.
- Clark, D. A. and Hulme, D. (2005), 'Towards A Integrated Framework for Understanding the Breadth, Depth and Duration of Poverty', *GPRG Working Paper 20*, Universities of Manchester and Oxford, UK. Available online at <http://www.gprg.org/pubs/workingpapers/pdfs/gprg-wps-020.pdf>
- Clark, D. A. and Qizilbash M. (2002), 'Core Poverty and Extreme Vulnerability in South Africa', *Discussion Paper No. 2002-3*, School of Economics, University of East Anglia, UK. Revised version: http://www.geocities.com/poverty_in_southafrica
- Clark, D. A. and Qizilbash, M. (2005), 'Core Poverty, Basic Capabilities and Vagueness: An Application to the South African Context', *GPRG Working Paper*, Universities of Manchester and Oxford, UK, forthcoming. Available online at <http://www.gprg.org/pubs/workingpapers/default.htm>
- Cooke and Kothari (2001)
- CPRC (2004), *The Chronic Poverty Report 2004/05*, Chronic Poverty Research Centre (CPRC), University of Manchester, UK. <http://www.chronicpoverty.org>
- Dercon, S. and Krishnan, P. (2000), 'Vulnerability, Seasonality and Poverty in Ethiopia', *Journal of Development Studies*, 36(6), 82-100.
- DFID 1999-2000 Sustainable Livelihoods Guidance Sheets.....
- Doyal, Len and Ian Gough (1991), *A Theory of Human Need*, Macmillan.
- Ellis, F. (2000), *Rural Livelihoods and Diversity in Developing Countries*, Oxford: Oxford University Press.
- Falaris, E.M. (2002). The effect of survey attrition in longitudinal surveys: evidence from Peru, Côte d'Ivoire and Vietnam. *Journal of Development Economics*.
- Frey, Bruno S. and Alois Stutzer (2001), *Happiness and Economics: How the Economy and Institutions Affect Human Well-Being*, Princeton University Press.

- Fukuda-Parr, Sakiko and Kumar, A. K. Shiva (eds) (2003), *Readings in Human Development*, New York: Oxford University Press.
- Gaiha, R. (1988), "Income Mobility in Rural India", *Economic Development and Cultural Change*, 36(2), 279-302
- Gaiha, R. (1989), 'Are the Chronically Poor also the Poorest in Rural India?', *Development and Change*, 20(2), 295-322.
- Gibson, J. (2001). Measuring chronic poverty without a panel. *Journal of Development Economics*, (65/243-266.
- Gough (2004)
- Green, Maia and Hulme, David (2005), 'From Correlates and Characteristics to Causes: Thinking About Poverty from a Chronic Poverty Perspective', *World Development*, Vol.33, No.6, pp.867-879.
- Hawthorn, G. (ed.) (1987), *The Standard of Living*, Cambridge University Press, Cambridge.
- Harriss, John (2001) *Depoliticising Development: The World Bank and Social Capital*. London, Anthem Press.
- Haq, Mahbub ul (1995), *Reflections on Human Development*, Oxford University Press, Oxford.
- Howe and McKay (2004)
- Hulme, D., K. Moore and A. Shepherd (2001), "Chronic Poverty: Meanings and Analytic Frameworks", Chronic Poverty Research Centre Working Paper No. 2, November.
- Iliffe, John (1987) *The African Poor: a History*. Cambridge University Press.
- Johnson, Susan, David Hulme and Orlanda Ruthven (2005), "Finance and Poor People's Livelihoods", in *Finance and Development: Surveys of Theory, Evidence and Policy* edited by Christopher J. Green, Colin Kirkpatrick and Victor Murinde, Cheltenham, Edward Elgar.
- Kabeer, N. (2005), 'Snakes, ladders and traps: changing lives and livelihoods in rural Bangladesh (1994-2001)', *CPRC Working Paper 50*, Institute for Development Policy and Management, University of Manchester, UK. Available online at <http://www.chronicpoverty.org/pdfs/50%20Kabeer.pdf>
- Klasen 1997 in Social Indicator Research
- Klasen 2000 in Review of Income and Wealth
- Lawson, McKay and Okidi (forthcoming)
- Lawson, D., McKay, A. and Okidi, J. (2003), 'Poverty Persistence and Transitions in Uganda: A Combined Qualitative and Quantitative Analysis', *CPRC Working Paper 38*, Institute for Development Policy and Management, University of Manchester, UK. Available online at <http://www.chronicpoverty.org/cpreports2.htm>
- McCulloch and Baulch
- McKay, A. and Lawson, D. (2003), 'Assessing the Extent and Nature of Chronic Poverty in Low Income Countries: Issues and Evidence', *World Development*, 31(3), 425-439.
- 2001 Frameworks for understanding the intergenerational transmission of poverty and well-being in developing countries. CPRC Working Paper 8. Manchester: IDPM/Chronic Poverty Research Centre.
- Mosse (1994)
- Narayan, Deepa, Robert Chambers, Meera Kaul Shah, and Patti Petesch (2000), *Voices of the Poor: Crying Out for Change*, New York, Oxford University Press for the World Bank, New York.
- Nussbaum, 1988
- Nussbaum, Martha C. (1995), 'Human Capabilities, Female Human Beings', in Martha C. Nussbaum and Jonathan Glover (eds), *Women, Culture and Development*, Oxford: Clarendon Press, pp. 61-104.
- Nussbaum, Martha C. (2000), *Women and Human Development: the Capabilities Approach*, Cambridge: Cambridge University Press.

- Nussbaum, M. C. (2003), 'Capabilities as Fundamental Entitlement: Sen and Social Justice', *Feminist Economics*, 9(2-3), pp.33-59.
- Nussbaum, Martha C. and Glover, Jonathan (eds) (1995), *Women, Culture and Development*, Oxford: Clarendon Press.
- Nussbaum, Martha C. and Sen, Amartya K. (eds) (1993), *The Quality of Life*, Oxford: Clarendon Press.
- O'Connor, Alice (2001) *Poverty Knowledge: Social Science, Social Policy and the Poor in Twentieth Century US History*. Princeton, Princeton University Press.
- Okidi, John and Andrew McKay (2003), "Poverty Dynamics in Uganda: 1992 to 2000", Chronic Poverty Research Centre Working Paper No. 27, May.
- Qizilbash, M. (2000), 'Vagueness and the Measurement of Poverty', *Discussion Paper No.200003*, School of Economic and Social Studies, University of East Anglia
- Qizilbash, M. (2002a), 'A Note on the Measurement of Poverty and Vulnerability in the South African Context', *Journal of International Development*, 14, pp.757-772.
- Qizilbash, M. (2002b), 'Development, Common Foes and Shared Values', *Review of Political Economy*, 14(4), pp.463-480.
- Qizilbash, M. (2003), 'Vague Language and Precise Measurement: the Case of Poverty', *Journal of Economic Methodology*, 10(1), pp.41-58.
- Qizilbash, M. (2005), 'Philosophical Accounts of Vagueness, Fuzzy Poverty Measures and Multidimensionality', *Discussion Paper No.2005-1*, School of Economics, University of East Anglia, Norwich.
- Rosenzweig
- Sahn and Stifel (2000)
- Saith, R. (2001), 'Capabilities: the Concept and its Operationalisation', *QEH Working Paper Series 66*, Queen Elizabeth House, University of Oxford.
- Scoones, I. (1998), 'Sustainable Rural Livelihoods: A Framework for Analysis', *IDS Working Paper*, No.72.
- Scott, C. (1992), "Estimation of Annual Expenditure from One Month Cross Sectional Data in a Household Survey", *Inter-Stat*, 8, 57-65, March.
- Sen, Amartya K. (1984), *Resources, Values and Development*, Oxford: Basil Blackwell.
- Sen, Amartya K. (1985), *Commodities and Capabilities*, Oxford: Elsevier Science Publishers.
- Sen's (1990) paper 'Development as capability expansion COMPLETE
- Sen, Amartya K. (1999), *Development As Freedom*, Oxford: Oxford University Press.
- Streeten, Paul P, S.J. Burki, Mahbub ul Haq, Norman Hicks, and Frances Stewart (1981), *First Things First, Meeting Basic Human Needs in Developing Countries*, New York: Oxford University Press.
- Stewart, Frances (1985), *Planning to Meet Basic Needs*, London: Macmillan.
- Stutzer, Alois (2004), "The Role of Income Aspirations in Individual Happiness", *Journal of Economic Behavior and Organization*, 54 (1), 2004, pp. 89-109
- Tilly, Charles (1998) *Durable Inequality*. Berkeley, University of California Press.
- UN Statistics Division (2004), Progress towards the Millennium Development Goals, 1990-2004. Available at: http://millenniumindicators.un.org/unsd/mi/mi_coverfinal.htm
- UNDP (2003), *Human Development Report 2003*, Oxford University Press, Oxford.
- Wilson, I., & Huttly, S. R. A. (2003). *Young Lives: A case study of sample design for longitudinal research*. London: Save the Children UK.
- World Bank (2001) *World Development Report 2000/2001*. Oxford, OUP.

Notes

¹ This paragraph and the next draw heavily on Clark and Hulme (2005).

² The Chronic Poverty Research Centre (CPRC) has explicitly set out to be multidisciplinary but a high proportion of its publications remain based on quantitative analyses of panel data (see www.chronicpoverty.org and Hulme and Shepherd 2003).

³ For a rare exception see Baulch and Masset (2003).

⁴ A fine example is sociologist/social historian Charles Tilly's (1998) *Durable Inequality*. Much of the content of this volume could be viewed as exploring the persistence of poverty in the USA. However, the term poverty is not even listed in the index. Tilly's insistence that analysis must focus on social relations and social categories means that methodological individualism, and phenomenological individualism, are ineffective tools at best.

⁵ FOOTNOTE ON YOUNG LIVES.

⁶ Note, however, that in practice getting reliable responses on land and livestock ownership is often difficult due to the sensitivity of these issue, and because these assets are less easily observed than, say, housing quality.

⁷ See also the volumes edited by Hawthorn (1987), Sen and Nussbaum (1993), Nussbaum and Glover (1995), and Fukuda-Parr et al (2003). The human development approach incorporates the basic needs approach to development as well as the capability approach, the emerging literature on development ethics and the UNDP's highly influential *Human Development Reports*. The Human Development and Capability Association's web site can be accessed at <http://www.hd-ca.org>

⁸ To what degree is a heated debate. For example, Nussbaum (2000 and 2003) claims to allow for additions and modifications to her list that permit agency and different cultures to shape the content of what constitutes well being. However, many would say this is mere lip service.

⁹ Southern Africa Labour and Development Research Unit – WHICH SURVEY?

¹⁰ In a separate but related paper, one of the authors writes with an anthropologist about these more critical accounts of the ways in which poverty is represented by researchers and the agencies that so often finance their work (Green and Hulme 2005).