

A Note on the Debate About Policy Choices for Poverty Alleviation

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INTRODUCTION

"Poverty alleviation is what Economic Development is all about." (World Bank 1990; 57). This makes imperative that we are able to reliably assess a developing country's progress in reducing poverty and that we have reasonable confidence about the impacts of policy initiatives and reforms on the poor.

Poverty alleviation may be either qualitative or quantitative. Examples of question which only calls for qualitative poverty alleviation are:

- has poverty increased or decreased over time?
- is it higher or lower in one place than other ?
- is there more poverty with or without some policy change ?

Quantitative poverty alleviation call for information on :

- how much difference there is in the amount of poverty.

In assessing how much impact on poverty is to be expected from a specific policy option, a quantitative poverty comparison is called for and little is assumed about the current knowledge of the concepts of welfare and poverty analysis.

Agonising over where to draw some " poverty line " is a case of energy wastage; almost always there will exist a range of possible lines over which the qualitative comparison and, hence, the policy conclusion is unaffected, and in some applications that range may be very wide indeed. And there are unavoidable value judgments underlying measuring practice. The method used to identify the poor may depend on the loss one attaches to miss identification; the error of missing someone who is actually poor would matter none in a situation in which the poverty assessment is being used to target relief than one in which it is only being used to monitor development progress. Some counting of the poor may be deemed adequate for a summary assessment of a country's overall progress in reducing poverty, but this is a very misleading basis for counting the poor reveals nothing about gains and losses amongst the poor, or the extent to which the poorest are reached by a policy . Similarly, circumstances of the set of people over which the alleviation is called for - the "domain"-can also have bearing on programme choices. For example, a person at a given consumption level may be deemed poor in one domain but not in another domain.

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The key questions for the applied economists to answer before programming for alleviating poverty are:

- how do we assess individual well-being or welfare ?
- at what level of measured well-being do we say that a person is not poor ?
- do we aggregate individual indicators of well-being for alleviating poverty ?

The first two questions are referred to as the "identification of problem" (which individuals are poor and how poor are they?). While the third is called the "aggregation problem" (how much poverty is there?). Much of the theoretical literature on poverty alleviation over the last 15 years or so has been concerned with the aggregation, while there are difficult issues concerning the identification problem, and these are issues which have greatest bearing on third question, i.e., aggregation problem.

MEASURING WELL-BEING : CONCEPTUAL APPROACHES

There are different conceptual approaches to measure well-being at the individual level. An important distinction is between "welfarist" and "non-welfarist" approach. (Sen, 1979). The former aims to base well-being solely on individual "utility" levels as assessed by individuals themselves, while the latter approach may pay little or no regard to information on utilities, this distinction is fundamental to the choices made – approaching well-being. For example, poverty alleviation in developing countries typically put a high weight on nutritional attainments. While it is clear that every individual values food consumption, one need not believe that individuals are themselves good judges of the importance of nutrition to well-being. A non-welfarist poverty alleviation may thus deem that the poor are better off even if the poor do not agree.

Economists have often shunned non-welfarist ideas, aiming to base well-being solely on utility information. A number of problems are encountered in doing so. If one rules out the possibility of knowing utilities across different individuals as well as precluding non-utility information, then there can be little hope of forming consistent poverty alleviation or other judgements about social well-being. Many economists are willing to admit explicit interpersonal assessments of utility; the more contentious issue is the relevance of non-utility information, and in particular, the extent to which one believes that individuals know what is best for themselves. In some situations personal judgements of well-being may be considered suspect because of incapacity for choice and psychology suggest the "cognitive dissonance" is pervasive. This suggests that people often deal with conflicting observations about themselves in ways which generate behaviour which an economist would deem to be "irrational".

It is common to find non-welfarist value judgements underlying policy discussions about poverty. For example, the arguments one bears in favour of "work fare" whereby recipients under anti-poverty schemes have to work to gain benefits, do not appear to be motivated by desire to raise the utility of recipients, for that would surely be higher if one simply made a cash transfer (Berley, Timothy, and Coate, 1988). The rational is often not welfarist. An economist's policy advice may well fall on deaf ears if it begins with the promise that only utility information should be

considered relevant. Utility informations (the preferences of people), no doubt have role but welfarism is clearly not a wholly acceptable policy choice.

The concept of "standard of living" can be either welfarist or non-welfarist. Either way a person's standard of living is dependent on individual consumptions of privately supplied goods, even if access to publicly provided goods are included. The problems lie of valuing that access which are often serious. Following this approach, current consumption is taken to be the preferred indicator of well-being in applied work, and income is only used as proxy for consumption.

In stratifying the living standards, the welfarist approach typically emphasizes aggregate expenditure on all goods and services consumed, valued at appropriate prices, including consumption from own production. By contrast a non-welfarist approach emphasizes specific commodity forms of deprivations such as inadequate food consumption or even more narrowly, inadequate nutrition (Tobin, 1970). Clearly there is nothing to guarantee that someone with a total consumption which is adequate to acquire a stipulated minimum bundle of various commodities will in fact choose to consume that bundle. Here welfarist and non-welfarist assessment of living standards may considerably be disagreed .

But the standard of living is not the only way to think about well-being. For example, one may say that what we really want to provide is the household's "opportunity" for consumption rather than actual consumption. To do so properly one should need data on wealth, which are rare or unrealistic. Thus the "opportunities approach" does not provide a fully compelling argument for preferring income to consumption as the welfare indicator for all households.

Non-welfarist ideas of "rights" can also have bearing on choices made in alleviating poverty. This approach says that we are concerned about poverty because we are concerned about the attainment of the right to participate in a society, and this depends crucially on income, particularly cash income. By this approach one cannot only prefer income, one may want to weight different components of income differently than is usually the case; for example, income received from the state but with same social stigma may add little to one's ability to participate in society (Atkinson, 1991).

The standard of living approach has been more popular in development literature (it is for example, the approach implicit in the World Development Report 1990; see World Bank Development Report 1990) and generally dictates a preference for consumption as the welfare indicator. Ideas such as "opportunities" and "rights" seem to have carried relatively more weight in developed country literature; particularly in Europe, and they are generally seen to indicate a preference for income (Atkinson, 1991). The greater importance that has been attached to the standard of living approach in developing country literature reflects the greater importance attached to specific forms of commodity deprivation, specially food insecurity.

HOUSEHOLD SURVEY

Household surveys are the single most important sources of data for programming poverty alleviation which tells us directly about the distribution of living standards in a society. Most household surveys include data on individuals within household, though rarely included the consumption which are typically aggregated to the household level. The most common approach uses the household as the unit of observation, a cross section analysis, and collects either consumption or income data. But it may be harder to interview poor because they live in remote areas or are itinerant, and we miss one distinct group of the poor : those who are homeless. Sometime it is aimed only to cover "economically active population" which precludes certain sub-groups of the poor. Sometime it is hard to cover all consumption and monetary expenditures on goods and services consumed plus the monetary value of all consumption from income in kind, such as food production on the family farm and the value of owner occupied housing, and there are common problems of valuation for consumption income derived from the household's own production, such as farm output. The valuation of benefits from public services is also extremely difficult. To evaluate the welfare effects of a change in food staple prices in a food producing developing country it is not enough to know household food production; whether a household gains or loses from a change in the price of food depends on consumption net of production. However, consumption is preferred to income as the living standards indicator, but households differ in size and composition, so "consumption per equivalent adult male " is used in the form of normalization. So for one male adult, one female adult and two children, an equivalent scale measures the number of adult males which that household is deemed to be equivalent to. The result of this method is that most equivalence scales tend to assign a value less than one to adult females and children; female and children tend to consume less of most goods than adult males. This reflects a difference in " needs" that women and children need less consumption to achieve the same level of well-being as men. Similarly child costs can also be financed by drawing on savings rather than consumption, so effect on consumption may occur at a latter date. Real differences in "needs" between certain age and gender groups and inequalities is outside options embodied distinct aspects. Let us explain potential implications of this problem using hypothetical data given in the following table.

Table 1
Pattern of Individual and Household Consumption

Household	<u>Individual Consumption</u>				<u>Household Consumption</u>	
	Male adult	Female adult	Ist Child	IInd Child	Per Person	Per Equivalence Male Adult
A	40	20	10	10	20	40
B	30	-	-	-	30	30

There are four persons living in two households. Household A has one adult male, one adult female, and two children. While B comprises a single adult male. Individual consumption are given in the above table. In terms of those consumptions

the three poorest persons are in household A. The government can make a transfer to the household which is deemed to be the poorest, but it cannot observe distribution within any household; all the government knows is aggregate household consumption and household composition. Which of the two households, A and B, should be first to receive help? As long as at least some of it benefits women and children, the answer is clearly household A. But to know this we need to know individual consumptions. In terms of household consumption per person, which is known, the answer is also A.

Using above equivalence scales – which weighs all persons equally – at least some of the benefits will go to three poorest persons. However, consider instead a household scale which assigns weight proportionally to actual consumption (as might be obtained by running a regression on sample of household with similar consumption levels and compositions to those in the above table). The equivalence scale would be 0.5 for an adult female and 0.27 for each child. There are thus two adult males in household A, which then has consumption per equivalent adult male which is more than of household B. B will receive help first, and none of it is likely to go to the poorest 60 percent of the population.

As with any non-luxury goods, the budget share devoted to food tends to decrease with total real consumption expenditures. This is "Engel's Law" which has often been invoked to justify using the non-food budget share as an indicator of living standards. There are number of problems with this indicator. First, relationship between the food budget share and consumption will generally differ across households (due to relative price differences they face, demographic differences, differences in preferences). The income elasticity of demand for food can be very close to unity for poor households, so food share can be a quite unreliable indicator.

Nutritional indicator or "under-nutrition" is a distinct concept to "poverty". However, the difference is in the definition of the individual "well being a used nutrient intakes (notably food energy, but also micro nutrients) versus a broader concept of consumption which" includes other attributes of food besides their nutritional value, and non-food consumption. Thus in a formal sense, one can view under-nutrition as "food energy poverty". But nutrition only captures one aspect of well-being in low income countries, food staple consumption will have a high weight in any demand-consistent welfare indicator, but it will rarely have a weight one. The weight people attach to food and nutrient intakes may considered too low consumption behaviour is not a good guide to welfare.

Anthropological approach too is feasible for close observation of poverty alleviation which provides useful supplementary information of living standards. For example Lanjouw and Stern used subjective assessments of poverty in a North India village based on the observations of resident investigators over one year (Lanjouw and Stern, 1991). This involved classifying households into seven groups (very poor, modest poor, modest, secure, prosperous, rich, very rich) on the basis of observations and discussions with villagers over that year. An issue of concern about this approach is overly stylized characterization of poverty. For example, the poor in village India are widely assumed to be landless, underemployed, and this assuming sufficient, 99 percent of households deemed poor by this characteristic, though this is only so far 54 percent

when their permanent income is used, based on averaging current incomes spanning over five years.

POVERTY LINES AND ABSOLUTE POVERTY LINE

Poverty alleviation policy generally assumes that there exist predetermined and well-defined standard consumptions- called "poverty line" – which must be reached if a person is not to be deemed "poor". Though there exist levels of consumption of various goods (food, clothing, shelter) below which survival beyond short period is threatened, it is less clear what these levels exactly are for any given individual. Furthermore, in most societies --- including some of the poorest – the notion of what constitutes "poverty" goes beyond the attainment of the absolute minimum needs for survival. Poverty lines exist, but views differ on their location.

Much talked in developing countries is "absolute poverty." and this is defined as the use of an especially stringent "survival" poverty line. Leaving aside the controversy, this should be fixed in terms of living standards indicator, and the most common approach is to estimate the cost of a bundle of goods deemed to assure that basic consumption needs are met in the specific domain of the poverty. The most important component may be food expenditures and the problem arises of choosing food energy requirement. This food energy requirement can vary across individuals and overtime for a given individual . Here only choice is left to make assumption about activity levels which determine energy requirements beyond those needed to maintain the human body's metabolic rate at rest are, however, "endogenous" socio-economic variable rather than "exogenous" physiological ones.

Another problem is that the minimum cost of the stipulated number of calories may be a good deal less than the expenditure level at which the poor typically attain the caloric level. Attaining adequate nutrition is not the sole motive for human behaviour, even for most of the poor ; nor is it the sole motive in food consumption.

The second problem is making an allowance for non-food consumption. Another difference between the developing and developed country is that absolute poverty considerations have dominated the former while relative poverty has been more important in the latter. Subjective poverty lines are inherently subjective judgements people make about what constitutes a socially acceptable minimum standard of living in a particular society. Different countries tend to use different poverty lines and that either countries tend to have higher poverty lines so too with individuals.

PREDICTION OF POVERTY PREVALENCE

There are three main prediction measures of poverty proposed by Foster, Greer and Thorbecke (1984). They are: the head count index H, the poverty gap index PG, and the Foster Greer Thorbecke P2 measure. The head count index is a measure of the prevalence of poverty, the poverty-gap index is measure of the depth of poverty, while the P2 measures the severity of poverty.

Using the WDR 1990 poverty income of \$ 370 per capita, at purchasing power parity in 1985, World Bank, used available aggregate data to predict the level of poverty in each country. This was done using regression model for each country celebrated to the data for other countries. The predictor variables were private consumption per capita from the national accounts evaluated at purchasing power parity as well as official exchange rates, the level of urbanization, the infant mortality rate, life expectancy at birth and the proportion of labour force who are women. But due to varying inequalities in social indicators and consumption based poverty measures and consumption based poverty being high but good indicators in low infant mortality with effective public health care in different countries the WDR 1990 poverty measure showed wide discrepancies placing some country 11th poorest from the survey estimates of head count index (25 percent of population) but least poor (5 percent of population amongst the 22 countries from prediction). These discrepancies arise from the distinct factor: first the extent of inequality varies from country to country and this is hard to pick up well without distributional data from a household survey, which is difficult for country like Nepal. Secondly regions differ in relationship between the social indicators and the consumption based poverty measures: some regions where consumption poverty is high have quite good indicators such as low infant mortality due to effective public health awareness or access to border health facility while others do not. These differences amongst regions can make hard to assess the extent of poverty even when survey completed precisely. The readily available economic and social aggregates can give best rough idea to the prevalence of poverty in the country.

CROSS SECTIONAL INDICATORS IDENTIFYING THE LONG TERM POOR

The indicators of living standards (consumption, food share, nutritional indicators) which are used in targeted poverty alleviation schemes typically show the characteristics of households at a single data or over a fairly short period. Unfortunately, neither the priori reasoning nor the limited available evidence offer much guidance on the choice of a static indicator for identifying the chronically poor. For example, even when households do smooth their consumption over time, the extent to which different static indicators move synchronously across household do have bearing on the choice between current consumption and current income as indicators of chronic poverty. The static indicators in identifying the chronically poor, may be identified in its performance by the list of the transfers needed to achieve any given impact on chronic poverty. Six possible cross-sectional items may be investigated: current income, current consumption (net of durable and ceremonial expenses), current consumption (including these), current food consumption, the share of consumption going to food and access to land. The other indicators that are commonly used, which are found to perform badly, are access to land and the share of food. Indeed it would be better to simply give every one (whether identified as poor or not) the same amount than the base targeting on the food share. In some years income elasticity of demand for food would be close to unity in these regions. The poor performance of access to land casts doubt on the efficacy of the various forms of land-contingent targeting that have been popular with policy makers.

BASIC NEEDS CHOICE

The basic needs approach to constructing poverty lines is the most common method used in developing countries. Here "food energy method" is used for construction of poverty lines. It proceeds on first fixing a food energy intake cut-off in calories, and then finding the consumption expenditure at which a person typically attains the food energy intake. One then counts the number of people with consumption expenditure less than this amount. Thus one is estimating the number of people whose total consumption expenditures would be insufficient to attain the predetermined food energy intake, given the prevailing relationship between food energy intake and total consumption across the population.

But this food energy is quit unlikely to generate poverty lines which are constant in terms of real consumption or income across the sectors/dates. The reason is that the relationship between food energy intake and consumption or income is not going to be the same across sectors/dates. And there is nothing in the policy to guarantee that these differences are ones which would be considered relevant to absolute poverty, and as agricultural works involve more strenuous than most urban activities the farmer entails higher food energy requirements to maintain body weight. Thus total expenditures and consumption (food energy) are very different between rural and urban areas. The difference (between food-energy and income relationship), is so large between urban and rural that at any given food energy requirement level, the urban poverty line exceeds the rural poverty line by a magnitude which is sufficient to cause a rank reversal in the estimated head count index of poverty between the two sectors. The most striking feature is the drop in poverty among self-employed farmers. They had the largest influence on aggregate poverty reduction, and most particularly on the reduction in severity of poverty (Ravallian, 1992).

CONCLUSION

However, it is difficult to link the perception of poverty to any particular object, yet revealed preference is inconsistent with well-being. Plausible errors lie in misguiding consumption behaviour, due to imperfect information with implications for education policies, due to irrationality because of cognitive dissonance, due to incapacity for rational choice because of being too young to know what is good for you and not having someone else to make a sound choice, yet, proper reasons should be identified in monitoring poverty alleviation. People are always the best judges of their own welfare, that is the welfarist argument, however, both non-welfarist and welfarist indicators side by side should be used in poverty alleviation schemes. And also anthropocentric measures of nutritional status of children, such as weight for-age or weight-for-height should also be applied.

Price subsidies represent a more efficient way of alleviating poverty than cash payments. An individual extends preferences when his welfare depends in any way upon the welfare of others. Extended preferences may be expressed in the form of interdependent utilities with either a subject of the community or entire remainder of the community.

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BOOK REVIEW

Kamal Raj Dhungel (1992): Mathematics and Statistics for Economics, Sarita Prakashan, Varanashi, p.174, Price Rs. 55 (NC).

Economics is a social science which has undergone substantial methodological improvements compared to other branches of social sciences. The increasing use of mathematics and statistics in economics has helped to establish the stochastic nature of different economic models. Without basic knowledge of statistics and mathematics it is difficult to understand the recent advancements in economic theories. Considering this fact, teaching of basic mathematics and statistics has been an integral part in the curriculum of economics of different universities of the world. The Tribhuvan University of Nepal has also introduced mathematics and statistics in its Intermediate, Bachelor and Master level curricula

The book under review is a text book for the Bachelor level students of economics in Nepal. It covers all the topics of mathematics and statistics included in the Bachelor level curriculum of economics of Tribhuvan University. The book is organised in three parts. The first part covers simple topics of algebra viz., equation, determinant and matrix. The second part covers elementary differential and integral calculus where differentiation, integration, maxima and minima of a function and constrained maximization and minimization are discussed. The third part focuses on statistics where measures of dispersion, correlation, regression, time series analysis and index number are discussed.

The book undoubtedly is helpful for students since it provides all the topics for students in one book. But the author does not seem serious in editing and proof reading before finalizing the book. Even in the preface of author, the second paragraph has mistakes like Hessians in place of Hessian and Borderd in place of boarded. In the first page of the book, the first line of the second paragraph has no connection with the equation he writes rather it should have appeared after $x = -\sqrt{3}$. The author has not maintained the proper balance between statistics and mathematics. He devoted more space for mathematics whereas his presentation in statistics are mere notes without sufficient proofs. If the book is thoroughly edited and seriously printed without printing errors, it will be immensely useful for economics teachers, students and other interested readers who want to study economics.

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