



Poverty and the Measurements

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ABSTRACT

Original Article:

Poverty is a condition in which a person or community lacks the fundamentals for having a minimum standard of well-being and life. These fundamentals may be material resources such as food, safe drinking water and shelter or they may include social resources like access to information, education, health care, social status and political power, or the opportunity to develop meaningful connections with other people in society. Poverty amid plenty is the world's greatest challenge and eradicating poverty is an ethical, social, political and economic imperative of humankind. To eliminate or reduce poverty it should be measured. The aim of measuring poverty is usually to make economic status comparisons between two or more groups. The present research examined the measures of poverty and then consequences and different aspects of poverty were regarded. Finally poverty reduction and critiques of the poverty measure were described.

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1. Introduction

According to World Bank poverty is defined as: The social consequences of the economic crisis including unemployment, high prices for basic commodities, growing urban poverty, increased crime and domestic violence, psychological alienation and environment degradation in Thailand, Philippines and Indonesia (World Bank, 2006). Poverty is a condition in which a person or community lacks the fundamentals for a minimum standard of well-being, and life. These fundamentals may be material resources, e.g. food, safe drinking water, and shelter, or they may include social resources, e.g. getting access to information, education, health care, social status and political power or the opportunity to develop meaningful connections with other people in society. To some extent poverty stems from the lack of strong scientific, technological and knowledge bases (Sharma, 2007). The great amounts of natural resources on a poor area are of limited value to the poor people because they do not have the tools with which to turn their resources into consumable wealth (African National Congress, 2004).

According to (Borlaug, 2004), "we cannot build world peace on empty stomachs". But do empty stomachs or, if you like, poverty, hunger and food insecurity really contribute to instability? Intuitively, the answer is yes. Poverty, hunger and food insecurity, together with a very unequal distribution of income, land and other material goods generate anger, hopelessness and a sense of unfairness and lack of social justice. This, in turn, provides a fertile ground for grievance and conflict which can be exploited by individuals and groups with a desire to cause conflict- whether armed rebellion, civil war, revolution, national or international terrorism. This is not to say that poor and hungry people are terrorists. Rather, the point is that the existing human misery and perceived unfairness serve as a moral and political foundation for those who with every reasons wish to promote armed conflict and terrorism. People with nothing to lose may also be willing to be recruited to execute violent acts if they are convinced that it would contribute to justice for the population group of interest or serve higher goals including those promoted by religions and politics.

2. Materials and methods

2.1. Literature Review

The first efforts by policymakers to construct a poverty indicator was introduced in the Brandt Report (1980) where poverty was defined in terms of "physical and social deprivation from an acceptable quality of life" denoted by a set of goods, services and environmental conditions. The second generation of poverty indices were more inclined towards ethical considerations and hence introduced enough flexibility to allow for changes in the societal uncertainty and perceptions of the poverty standard (Chakravarty, 1983).

They also moved towards being policy-oriented in order to help in the design of redistribution policies targeted at the poor (Keen, 1992). The second generation of poverty indices also tackled the problem of aggregations which do not measure poverty changes within subgroups of the population (Foster & Shorrocks, 1991). Among the other improvements introduced by this family of indices were the implications of the disparity in connoting deprivation from one society to another

(Shorrocks, 1995).

Noorbakhsh (1998) defined specific national benchmarks in order to tackle the subjectivity of selecting and weighing the components of indices. Parallel to these specific CIPs, economic theories of poverty and social welfare developed in the hands of a number of leading development economists who preferred to use the non-specific qualitative approach (Bradbury, 1997).

The third generation of poverty indices was policy-oriented, displaying skepticism towards the conditional loans of the Bretton Woods institutions and the Paris Club. Since the trickle-down theory of anti-poverty policy had not adequately run its course, the relationship between growth and poverty was re-examined and questioned (Blank & Card, 1993).

Cronyism and favoritism were indeed robbing robust growth of its poverty eradication tributes leaving the lowest quintile of the population highly vulnerable (Powers, 1995). An important factor responsible for the incongruent reductions of poverty is the marginalization of specific households headed by females or ethnic minorities (LeBlanc, 2000).

At this point, poverty indices started to assess the efficacy of poverty eradication policies such as wage and education programs (Hoover et al., 2004). Ever since, many attempts have been made to identify the actual roots of poverty empirically and to introduce effective redistributive reforms. One approach is to measure consumption, rather than income distribution, as an indicator of poverty (Bhalla, 2002). This approach attempts to use consumption as a multidimensional concept of poverty since it reflects the actual basket of commodities enjoyed by households (Luchters & Menkhoff, 2000). Another more sophisticated approach measures a combination of deprivations that concomitantly batter a multi-dimensionally poor households (Alkire & Santos, 2010). The adequate identification of the source of household deprivation will help policymakers to remove these deprivations and to bridge income and resource inequalities (Chakravarty et al., 2008). Policymakers need to focus on all individuals living in poverty not only those who live in a geographically poor region. To tackle this problem, several efforts have been exerted to design CIPs on a country-by-country basis (Asselin, 2009). But how could researchers and policymakers select poverty indicators in an unbiased manner? One method is to invite impartial observers to make pragmatic choices on behalf of stakeholders premising that they are totally unaware of the stakeholders' social class, status, outcome of income and wealth redistribution (Alkire, 2008). At the other extreme, it is argued that the prime concern of welfare policies is to empower stakeholders to make choices in accordance with their preferences (Camerer & Fehr, 2006). Since 2000, poverty alleviation in line with the UN Millennium Development Goals (MDGs) has been a primary focus of public policy in all UN member countries. However, whilst an array of policies, strategies and tools have been designed and implemented by governments to eradicate poverty, their efficacy is still intensely debated (Chowdhury, 2009; Ricasio, 2006; Sachs, 2005; UN, 2010; UNDP, 2008; Whiteford & Adema, 2007).

2.2. Concepts of Poverty

The concepts of poverty which underlie the various usages refer to some people, individually or collectively, who experience conditions of life or social relations which fall below some kind of minimum level needed to experience being and be treated as an autonomous person with a full capacity to participate in society. Poverty is commonly conceived as those deprivations or unequal relations caused by lack of material resources, but Amartya Sen's conceptualization used the term capability to focus on the activities needed for participation rather than the passive resources alone. Some of unstable usages do not distinguish the reasons why people fail to attain minimum living standards and include other causes of social exclusion which provoke disagreement over boundaries and cause overlapping between the politically expedient uses of the terms poverty or exclusion (Veit-Wilson, 2007-2008).

The concept of poverty may not carry the same connotations in different languages and cultures. In English there are many ambiguities. Concepts of the condition are often confused with the essence of the characteristics of those suffering from it, or with definitions derived from measurement techniques (Veit-Wilson, 2007-2008).

2.3. Purposes for Poverty Measures

The definition and measurement of poverty have evolved and changed over time. Rowntree (1901) was probably the first expert to attempt to define poverty in terms of the level of deficiency of nutrition and basic physical needs. The poverty headcount ratio was introduced by Abel-Smith & Townsend (1965) who extended the definition of poverty to include deprivation from employment and resources. The multidimensionality of non-monetary poverty attributes such as food, housing, clothing, education, health, and the provision of public goods were introduced consecutively (Watts, 1968).

Since poverty is the main cause for most of other social problems covered in the MDGs, the eradication of extreme poverty is the predominant goal. Generally, there are two kinds of analysis presented in the literature on poverty debate. One is concerned with the definitions, measurements, and levels of poverty across countries and the other with the explanations of why some countries are able to reduce poverty faster than the others. The latter aspect is more relevant and important for policy formulations particularly in developing countries. The \$1 benchmark used by the World Bank is assumed to represent extreme poverty (Veit-Wilson, 2007-2008).

2.4. Measures of Poverty

Measures may be direct (relating to criteria of minimally adequate levels of living or social relationships) or indirect (using the incomes and other resources needed as proxies for the minimum level of living). They may be based on normative standards or derived empirically from the populations surveyed or affected. Measures commonly relate to individuals or households. Since surveys generally investigate households, measures of individuals in income poverty adjust household

data for the size and composition of the household regarding the age and sex of its members. Children's income needs are related to those of adults by using equivalence scales (Veit-Wilson, 2007-2008).

Poverty is measured based on diversification criteria. The following are some of them:

Poverty lines: Are those direct or proxy measures which produce an income threshold or cutoff which can be used for quantitative measurement of individual or household incomes. Qualitative measures of the experience of poverty are direct but often neglected because they are difficult to use statistically though they can be used to identify people in poverty.

Budget or 'shopping basket' measures: it calculates the total cost of all the purchasable components of any specified standard of living over a given period of time. The total cash cost, adjusted for tax and other relevant deductions, is then used as an income proxy for the minimally adequate or other living standards. The components may be chosen normatively or based on empirical evidence of customary living patterns in order to reflect the chosen standards directly.

Statistical measures: Three approaches derive so-called poverty measures from national income statistics. They can not be described as either direct or indirect since they do not relate to any real standard of living. One measures the proportion of the population with the lowest fifth or tenth of all incomes. Another measures the proportion with incomes below a percentage of the mean or median income. Many international poverty statistics in industrialized countries are now based on the latter approach where the threshold is typically set at 60 percent of the equivalent median household income before or after housing costs are deducted. The third approach used by the World Bank to estimate the number of people in poverty in some countries uses measures such as the Gross National Product per head together with other indicators or an assumed average income of small number of US dollar a day. Such macro-measures do not reflect the non-marketed aspects of poverty affecting individuals particularly in countries where needs are satisfied outside the market and through relationships; though they can be supplemented by qualitative studies to illustrate the meaning of poverty from the perspective of those who suffer it.

'Official poverty lines': Is a name for measures used by governments. Some, such as governmental minimum income standards are based on ideas of actual living standards. Others are mere social statistical constructs of arbitrary low incomes or based simply on the social assistance benefit rates, neither of which may relate to any evidence of minimal income needs (Veit-Wilson, 2007-2008). Some social sciences and especially economists, for example, have almost exclusively relied on income consumption and to some extent on human welfare as proxies to understand and measure one's status of poverty and well-being (Hagenaars & Van Praag, 1985). Other social sciences have viewed poverty as a function of lacking individual capabilities such as education or health to attain a basic level of human well-being. While poverty studies have adopted these three broadly constructed definitional and measurement approaches, economic well-being, capability, and social exclusion-meaningful efforts are yet to take place to integrate them. The complexity of the issue of defining what poverty really is indicates that this reductionist approach to poverty definition with excessive emphasis on one aspect cannot take us far enough in the understanding of factors laying at the core of poverty problems (Wagle, 2002).

Indeed, a number of poverty measures (Foster et al., 1984; Shorrocks, 1995) and Thon's revision of the Sen index which is close to the Shorrocks index and named the SST index (Osberg & Xu, 1999) have been devised for measuring and analyzing the nature of poverty. Substantial amount of studies have been conducted at various levels to understand the nature and dynamics of poverty (Ali & Thorbecke, 2000). Most of such studies have examined the poverty profile of countries using such quantitative measures and examined changes in poverty as well as the consequences of growth on poverty.

In Africa, poverty is known to be vast, deep and almost chronic. It has been found to be dominant in rural Africa more than the urban populace (Ali & Thorbecke, 2003). The depth and severity of rural poverty in SSA in 1993 was such that head-count index was 58.72 per cent, and the poverty gap was 26.51 percent (Ali & Thorbecke, 2003) with a Gini coefficient of 42.88 percent indicating the level of inequality in SSA through which one gains an insight into the welfare picture in SSA. It was estimated also that 45.5 percent of the rural populace in SSA face situations of relatively high income inequality. Gang et al. (2002) showed the significance of education in their study of poverty among caste and ethnic groupings in rural India. They note that education, in particular from the secondary level upwards is more likely to result in greater reduction in incidence of poverty among certain caste. Coulombe and McKay (1996) also found the importance of education. Results from Africa are not very different in terms of the role of education. Grootaert (1997) in a study of poverty in Cote d'Ivoire showed that education was influential in reducing the likelihood of poverty with the effect being more pronounced and intensive in the rural areas. Okurut, et.al also found similar results with respect to Uganda, where the odds change of being non-poor was higher for household heads with higher levels of education.

Demographic factors such as household size and the age of the household head have also been used in examining the determinants of poverty. The larger the household size the more likely the household is to be poor, since there will be more mouths to feed and catering for. However, the presence of a non-linear relationship between poverty and the household size has been established through the emergence of economies of scale in consumption, therefore; as the household gets larger incidence of poverty is reduced (Dreze & Srinivasan, 1997). Locational effect has also been instrumental in poverty determination. Households located in less endowed towns are more likely to be poor compared to those in more endowed regions. There are therefore external benefits in terms of proximity to well-endowed towns and regions.

2.5. Consequences of Poverty

The effects of poverty may be produced, thus creating a "poverty cycle" operating across multiple, individual, local, national and global levels.

Health: One third of death rate – some 18 million people a year or 50,000 per day – is due to poverty-related causes: in total 270 million people, most of them women and children have died as a result of poverty since 1990 (World Health Organization, 2010). Those living in poverty suffer disproportionately from hunger or even starvation and disease. Those living in poverty suffer lower life expectancy. According to the World Health Organization, hunger and malnutrition are the

single gravest threats to the world's public health and malnutrition is by far the biggest contributor to child mortality present in half of all cases

Hunger: It is raised in the costs of living which make poor people less able to afford items. Poor people spend a greater portion of their budgets on food than richer people. As a result, poor households and those near the poverty threshold can be particularly vulnerable to increases of food prices. For example, in late 2007 increases in the price of grains ("The cost of food: Facts and figures," 2010) led to food riots in some countries (Watts, 2007; Mortished, 2008). The World Bank warned that 100 million people were at risk of sinking deeper into poverty. Threats to the supply of food may also be caused by drought and the water crisis. Intensive farming often leads to a vicious cycle of exhaustion of soil fertility and decline of agricultural yields. (Bernd Herrmann) Approximately 40% of the world's agricultural land is seriously degraded. In Africa, if current trend of soil degradation continues, the continent might be able to feed just 25% of its population by 2025 according to United Nations University's Ghana-based Institute for Natural Resources in Africa. Every year nearly 11 million children living in poverty die before their fifth birthday. 1.02 billion People go to bed hungry every night.

Education: Research has found that there is a high risk of educational under achievement for children who are from low-income housing circumstances; this is often a process that begins in primary school for some less fortunate children. Instruction in the US educational system as well as in most other countries tends to be geared towards those students who come from more advantaged backgrounds. As a result, these children are at a higher risk than other children for retention in their grade, special placements during the school's hours and even not completing their high school education. There are indeed many explanations for why students tend to drop out of school. For children with low resources the risk factors are similar to others such as juvenile delinquency rates, higher levels of teenage pregnancy and the economic dependency upon their low income parent or parents (Huston, 1991). Families and society who submit low levels of investment in the education and development of less fortunate children end up with less favorable results for the children who see a life of parental employment reduction and low wages. Higher rates of early child bearing with all the connected risks to family, health and well-being are majorly important issues to address since education from preschool to high school are both identifiably meaningful in life (Huston, 1991).

Violence: According to experts many women become victims of trafficking, the most common form of which is prostitution acting as a means of survival and economic desperation. According to ECPAT International, an NGO designed to end the commercial sexual exploitation of children, deterioration of living conditions can often compel children to abandon school in order to contribute to the family income putting them at risk of being exploited. For example, in Zimbabwe, a number of girls are turning to prostitution for food to survive because of the increasing poverty (Thomson, 2009).

2.6. Theories of Poverty

Since 1960, different theories of poverty have been described that researchers discussed two theories in this paper.

A) Labor Market Discrimination

There is a voluminous literature on racial and gender discrimination in the labor market which dates back to the pioneering works of Becker (1971) and Arrow et al., (1973). According to Nationality Discrimination in the Labor Market, 233 labor market discriminations can take place with respect to other personal attributes such as age, religious affiliation, sexual orientation, weight, accent, or speech patterns. Another attribute that could induce discriminatory treatment is workers' nativity status. Nationality discrimination occurs when, *ceteris paribus*, immigrants are paid less because they were born outside of the host country. This type of discrimination could be driven by prejudice (taste discrimination), imperfect information (statistical discrimination), or institutional factors.³ in this study, we will focus on nationality discrimination due to prejudice (Veit-Wilson, 2007-2008).

Labor market discrimination may take the form of different wage rates for equally productive workers with different personal characteristics (such as race, sex, age, religion, nationality, or education) (Veit-Wilson, 2007-2008). Labor market discrimination may also take the form of exclusion from jobs on the grounds of social class, union membership, or political beliefs. American economist (Becker, 1957) has developed a theory of discrimination which examines the behavior of employers who have displayed a taste for discriminatory practices (Veit-Wilson, 2007-2008).

B) Dual Labor Market Theory

There are two distinct economic systems. The first is what is normally understood as the economic system, the second is the patriarchal system of producing goods and services in the household. The subordination of women is rooted in the latter having consequences throughout the conventional economic system as well (Humm, 1989). Similarly, the theory of employer search posits that matching of a worker to a position is the result of employers picking among multiple applicants (Barron & Rello, 2000). Several factors affect the nature of employer search – the type of position to be filled, the characteristics of the employer, and the nature of the labor market confronted by the employer (Barron & Rello, 2000).

2.7. Poverty and the Different Aspects

Social researchers believe that poverty is a complex phenomenon influenced by a large number of factors which can be studied from many different perspectives. The study and interpretation of poverty is not a simple task.

There are some ways to measure poverty and also some ways to define it. Some of them describe as below:

Economic aspects of poverty focus on material needs, typically including the necessities of daily living such as food, clothing, shelter, or safe drinking water. Poverty in this sense may be understood as a condition in which a person or community is lacking in the basic needs for a minimum standard of well-being and life, particularly as a result of a persistent

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lack of income. Analysis of social aspects of poverty links conditions of scarcity to aspects of the distribution of resources and power in a society and recognizes that poverty can be a function of the diminished "capability" of people to live the kinds of lives they value. The social aspects of poverty may include lack of access to information, education, health care, or political power.

Poverty may also be understood as an aspect of unequal social status and inequitable social relationships experienced as social exclusion, dependency, and diminished capacity to participate or develop meaningful connections with other people in society (Simmel, 1965; Silver, 1994; Townsend, 1979). Such social exclusion can be minimized through strengthened connections with the main stream, e.g. by provision of relational care to those who are experiencing poverty.

The World Bank's "Voices of the Poor," based on research with over 20,000 poor people in 23 countries, identifies a range of factors which poor people perceive as part of poverty. These include:

- Precarious livelihoods
- Excluded locations
- Physical limitations
- Gender relationships
- Problems in social relationships
- Lack of security
- Abuse by those in power
- Disempowering institutions
- Limited capabilities
- Weak community organizations

Voluntary poverty: Among some individuals, poverty is considered a necessary or desirable condition which must be embraced to reach certain spiritual, moral, or intellectual states. Poverty is often understood to be an essential element of renunciation in religions such as Buddhism (only for monks, not for lay persons) and Jainism, whilst in Roman Catholicism it is one of the evangelical counsels.

Human capital & poverty: The relationships between human capital and earnings have been richly documented over the last several decades. Starting with economists like Schultz (1961), the human capital theory posits that individuals and their families make analogous decisions regarding human capital investments in order to increase his or her future productivity and earnings. Some examples of human capital investments may include formal education (Schultz, 1961), on-the-job training (Mincer, 1962), job search (Spence, 1973), information evaluation (Stigler, 1962) and geographical migration (Sjaastad, 1962). Others have included human health as another aspect of human capital that determines individual earnings (Bartel & Taubman, 1979). Human capital is an issue of inequality that traps many economically vulnerable populations in poverty. When "jobs aren't enough" to encourage employment mobility, one would have to ask whether America's "public will" needs to be revitalized in the areas of policy, labor market, family and educational institutions (Iversen & Armstrong, 2006).

Poverty and growth: In contrast with the broad-based growth views, the pro-poor growth proponents, while recognizing the necessary role played by openness and growth, maintain that this does not constitute a sufficient condition for poverty reduction. They suggest a broader approach which includes social, economic, and political dimensions arguing that focusing exclusively on economic growth and income generation as a development strategy is ineffective since it deepens the poverty of many and does not acknowledge intergenerational transmission of poverty (United Nations, 2005).

Vulnerability to poverty: The literature on chronic and transient poverty has been especially insightful in this respect. Exposing the micro- and macro-level processes that "are responsible for individuals, households and communities sliding into long-term poverty, maintain the poor in poverty and ensure responses in the form of economic behaviors and activities that reduce investment, asset formation and economic growth" (Barrientos, 2007). Vulnerability has come to be seen as both a cause and symptom of poverty. Thereby creating a mutually reinforcing cycle from which it is difficult to escape (Prowse, 2003). More recently it was put forward that the relationship between vulnerability and poverty may even have the potential to create poverty traps (Adato et al., 2006; Carter et al., 2007; Dercon, 2004).

Vulnerability and poverty traps: A poverty trap refers to a households' and/or individuals' inability to overcome the structures that keep them in an inveterate state of deprivation (Barrientos, 2007). Although the reasons are manifold, there is a measure of agreement suggesting that poverty incidences rise starkly with uninsured losses involving low asset and entitlement households (Hoddinott, 2006). In these circumstances even relatively minor shocks can inhibit full recovery (Carter et al., 2007; Hoddinott, 2006). While poverty is not rooted in market failures alone, households are more likely to recover if they can protect their assets through access to financial and labor markets (Adato et al., 2006; Barrientos, 2007; Wisner et al., 2004).

Poverty and Social exclusion: The indexes of inclusion and exclusion do not take poverty into account. Wealth and poverty are, however, important in terms of what constitutes good and poor living conditions. Therefore, we start by distinguishing between poverty and social exclusion: poverty concerns limited economic and material resources while social exclusion concerns a broader range of social problems that make it hard or impossible for a person or a group to be included and participate in one or several central areas in society. While poverty is about lack of income and material resources and the deprivation and nonparticipation following from lack of these resources, social exclusion is about nonparticipation in a broader sense (Sen, 2000). Social exclusion as nonparticipation is related to many other factors besides income and material resources such as old age, poor health conditions, handicaps, sickness, cultural diversity, discrimination, or lack of time (Veit-Wilson, 2007-2008).

2.8. Poverty Reduction

The impact of poverty alleviation and reduction programs in developing countries has been studied by many authors (Asian Development Bank, 1993; Fan & Rao, 2003). Although impact assessment studies are routinely conducted for most government funded poverty programs at different stages of program implementation, most of these evaluate the programs in terms of their ability to achieve the stated objectives of the program, deviations from program guidelines during implementation, efficiency of targeting and gaps between targets and achievements. However it should be obvious that such analytical studies could provide critical inputs for designing new and improved poverty reduction programs. Fan and Hazell (1999) showed that additional government expenditure on roads had the largest impact on poverty reduction followed by government spending on research and development and education – in that order. In another study, it was found that for each type of investment, e.g. on roads, irrigation, electrification, etc. – the highest marginal impact on agricultural production and poverty alleviation occurs in rained lands, while irrigated areas rank second or last (Fan & Hazell, 1999). Differences in marginal impacts such as these could prove immensely useful while redesigning public investment programs.

Unlike the alleviation programs, successes of poverty reduction programs require the active participation of the poor beneficiaries. Consequently, poverty reduction programs need to be designed to make the beneficiaries actively participate in economic activities at higher levels. Most of the studies on poverty alleviation and reduction programs emphasize structural bottlenecks, asymmetric information, and rent seeking behavior (Veit-Wilson, 2007-2008).

Various poverty reduction strategies are broadly categorized here based on whether they make more of the basic human needs available or increase the disposable income needed to purchase those needs. Some basic needs such as improving access to education may also help income accretion (Veit-Wilson, 2007-2008).

2.9. Critiques of the Poverty Measures

There is much debate concerning how one measures poverty. To arrive at an estimate of poverty, a series of difficult measurement choices must be made (see Jenkins (1991) for a full discussion). For example, is poverty a relative or absolute concept? What is the appropriate poverty line? What is the appropriate unit of analysis: the household, the family or the individual? What is the best proxy measure of well-being? What equivalence scales should be used? Another problem, which has received less attention in the empirical analysis of poverty, is the impact of compositional factors on the measurement of poverty. More specifically, the level of poverty, however defined, is affected by the demographic composition of the population for which it is measured. For the purposes of comparing changes in poverty over time (or across areas or between groups), it would be useful to be able to measure differences in poverty as if there were no changes in compositional factors. As is discussed below, certain compositional factors in the measurement of poverty are “controlled for” through the use of equivalence scales (Veit-Wilson, 2007-2008).

Different claims have been heard within the development community about how just much progress has been made against poverty (Ravallion, 2003). As a matter of fact, research has presented conflicting arguments and estimations, with some claiming that overall poverty is on the decline, while others claiming differently. The World Bank (2005) figures show that between 1987 and 1998 the share of the population in developing and transition economies living on less than \$1 a day fell from 28 percent to 24 percent. Further, it is estimated that the number of the poor in the world were 200 millions fewer in 1998 than in 1980 (World Bank, 2002).

3. Conclusion and suggestions

Poverty is a highly political and complex issue. Poverty has diverse meanings which an examination of its various aspects is necessary. Baulch (1996) suggested a pyramid structure in conceptualizing poverty, incorporating the size of private consumption, common resources, public goods, capital (human and physical), dignity (social receptivity) and independence (freedom from social control) as determining elements of poverty. Sen (2000) emphasized the importance of the availability of economic opportunities and defined the poor as those who lack the potential ability to utilize the various economic opportunities open to them as well as the lack of potential ability to function in the society as an ordinary person. Further, following the above arguments, Hara (1996) defined poverty as a “people or social class that cannot participate in the labor market which evolves structurally with industrialization”. The approaches to measuring poverty can be roughly divided into quantitative and qualitative methods.

The qualitative studies targeting at better understanding the phenomenon of poverty found that poverty during transition is associated with feeling of powerlessness, social exclusion and lack of social support (Caldwell, 2004). The poor disproportionately suffer from domestic violence, violence by police, hunger, and poor health (Narayan et al., 2000a). Quantitative studies, on the other hand, reported that being poor is associated with having less access to public services such as education, early childhood development, and health care as well as lower probability of buying prescribed medication (Giddings et al., 2007). Another stream of quantitative studies investigated individual, household, and community determinants of poverty (Habibov, 2010). These studies found that having low education and poor health, being unemployed and living in households with a high number of dependents such as children under 16-years-old, pensioners, disabled, and having residency in rural or remote areas are robust determinants of poverty as measured by objective measures, for example, low income, consumption, or expenditures (Habibov & Afandi, 2009).

Poverty reduction is a fundamental objective of economic development and reducing poverty is a major focus of governments, international financial institutions, non-governmental and community-based organizations. The success of

policies, programs, and development lending is increasingly judged in terms of poverty reduction. There has been substantial progress over the past three decades in the measurement of poverty with the development of additively decomposable measures that reflect not only the number of poor persons, but also the depth and severity of poverty for sub-groups of the population. As most poverty estimates come from sample survey data, the statistical properties of poverty measures and appropriate inference procedures are important for evaluating the precision of poverty estimates and the statistical significance of poverty comparisons (Veit-Wilson, 2007-2008).

The reduction of poverty is very high in the policy agenda of many countries. In order to fight poverty, policy makers need to build the political and legal frameworks that encourage the absorption and application of scientific innovations. Such a scientific innovation is Tele-Working (or telecommuting) which means working at a distance using telecommunications technology (Gurstein, 2001). Montreuil & Lippel (2003) defined Tele-Working as they are stressing the fact that to talk about Tele-Working, it is essential that it is located away from the place where the rest of employees work. Conversely, (Atkyns et al., 2002) think that we can only speak of Tele-Working when there is a data transmission connection between the remote unit and the unit of the company. Tele-Working is flexible because employers and telecommuters can determine when it happens, what work will be done during it and where it happens. Telecommuters work away from their usual work base and carry out various activities such as data input, checking of documents, analyses of reports, customer service, sales, planning and word processing. Various jobs proper for Tele-Working are data entry and typing, secretariat work, telephone operators/counselors, accounts, management, sales and marketing, translation, writing and editing/journalism, research, graphic design, web site management and etc. It has long been recognized that Tele-Working might have a central role in development (Nilles, 1998). Tele-Working increases productivity, efficiency, and global competitiveness and creates value-added employment opportunities. It leads to sustainable development as it brings works to remote areas and generates jobs for women, poor and disabled people. Finally, Tele-Working lessens rural-urban migration (Simpson et al., 2003).

References

- [1] Abel-Smith, B., & Townsend, p. (1965). *The Poor and the Poorest*. London: Bell.
- [2] Adato, M., Carter, M. R., & May, J. (2006). "Exploring poverty traps and social exclusion in South Africa using qualitative and quantitative data". *Journal of Development Studies*, 42 (2), 226-247.
- [3] African National Congress. (2004). *Manifesto 2004: A People's Vcontract Create Work and Fight Poverty*, ANC, Johannesburg.
- [4] Ali, A. A. G., & Thorbecke, E. (2000). "The state and path of poverty in Sub-Saharan Africa: some preliminary results". *Journal of African Economies*, 9(1), 9-40.
- [5] Ali, A. A. G., & Thorbecke, E. (2003). "The state of rural poverty, income distribution and rural development in Sub-Saharan Africa". Nairobi: Nissanke, M., Aryeetey, E.
- [6] Alkire, S. (2008). "Choosing dimensions: the capability approach and multidimensional poverty", in Kakwani, N. and Silber, J. (Eds), *The Many Dimensions of poverty*, Palgrave-MacMillan, Basingstoke.
- [7] Alkire, S., & Santos, M. E. (2010). "Acute multidimensional poverty: a new index for developing countries". Paper presented at the Oxford Poverty and Human Development Initiative, Working Paper
- [8] Arrow, K., Bowles, S., & Durlauf, S. (1973). *Meritocracy and Economic Inequality*. Princeton: Princeton University Press.
- [9] Asian Development Bank. (1993). *Poverty in Developing Asia: Salient Issues and Lessons*, Economics and Development Resource Centre, Manila.
- [10] Asselin, L. M. (2009). *Analysis of Multidimensional poverty*. New York.
- [11] Atkyns, R., Blazek, M., & Roitz, J. (2002). "Measurement of environmental impacts of telework adoption amidst gchange in complex organizations". *AT and T Survey Methodology and Results, Resources, Conservation and Recycling*, 36(3), 267-285.
- [12] Barrientos, A. (2007). "Does vulnerability create poverty traps?" Paper presented at the CPRC Working Paper.
- [13] Barron, M. A., & Rello, F. (2000). *The Impact of the Tomato Agroindustry on the Rural Poor in Mexico*. *Agricultural Economics*, 23(3), 289-297.
- [14] Bartel, A., & Taubman, P. (1979). "Health and labor market success: the role of various diseases". *The Review of Economics and Statistics*, 61, 1-8.
- [15] Baulch, B. (1996). "The new poverty agenda: a disputed consensus (editorial)". *IDS Bulletin*, 27(1), 1-10.
- [16] Becker, G. S. (1971). *The Economics of Discrimination*. Chicago: University of Chicago Press.
- [17] Herrmann, B. *Exploitation and Over-exploitation in Societies Past and Present*, Brigitta Benzing.
- [18] Bhalla, S. (2002). *Imagine There's No Country: Poverty, Inequality, and Growth in the Era of Globalization*, Institute for International Economics, Washington.DC.
- [19] Blank, R., & Card, D. (1993). "Poverty, income, and growth: are they still connected?" , *Brookings papers on Economic Activity*. 2, 285-325.
- [20] Borlaug, N. (2004). Presentation at the World Food Prize Symposium (October).
- [21] Bradbury, B. (1997). "Measuring poverty changes with bounded equivalence scales: Australia in the 1980". *Economica*, 64, 245-264.
- [22] Brandt, W. (1980). *North-South*, Pan, London.
- [23] Caldwell, M. (2004). *Not by Bread Alone: Social Support in the New Russia*. Berkeley, CA: University of California Press.
- [24] Camerer, C., & Fehr, E. (2006). "When does economic man dominate social behaviour?" *Science Journal*, 311, 7-52.
- [25] Carter, M. R., Little, P. D., Mogue, T., & Negatu, W. (2007). "Poverty traps and natural disasters in Ethiopia and Honduras". *World Development*, 35(5), 835-856.
- [26] Chakravarty, S. R. (1983). "A new index of poverty". *Mathematical Social Science*, 6, 307-313.
- [27] Chakravarty, S. R., Deutschb, J., & Silberb, J. (2008). "On the Watts multidimensional poverty index and its decomposition". *World Development*, 36(6), 1067-1077.
- [28] Chowdhury, A. (2009). "Microfinance as a poverty reduction tool-a critical assessment" Paper presented at the Working Papers, Department of Economics and Social Affairs, United Nations, Geneva
- [29] Coulombe, H., & McKay, A. (1996). "Modelling the determinants of poverty in Mauritania". *World Development*, 24(6), 1015-1031.
- [30] Dercon, S. (2004). "Growth and shocks: evidence from rural Ethiopia". *Journal of Development Economics*, 74, 309-329.

- [31] Dreze, J., & Srinivasan, P. V. (1997). "Widowhood and poverty in rural India: some inferences from the household survey data". *Journal of Development Economics*, 54, 217-234.
- [32] Fan, S., & Hazell, P. (1999). "Are returns to public investment lower in less-favoured areas? An empirical analysis of India". Paper presented at the EPTD Discussion Paper, International Food Policy Research Institute
- [33] Fan, S., & Rao, N. (2003). "Public spending in developing countries: trends, determinants and impact". Paper presented at the EPTD Discussion Paper, International Food Policy Research Institute.
- [34] Foster, J., Greer, J., & Thorbecke, E. (1984). "A class of decomposable poverty indices" *Econometrica*, 52, 761-766.
- [35] Foster, J., & Shorrocks, A. F. (1991). "Subgroup consistent poverty indexes". *Econometrica*, 59(3), 687-709.
- [36] Becker, G. (1957). *The Economics of Discrimination*. Chicago.
- [37] Simmel, G. (1965). *The poor, Social Problems* (Vol. 13).
- [38] Gang, I. N., Sen, A., & Yun, M. S. (2002). *Caste, Ethnicity and Poverty in Rural India*. Paper presented at the Institute for the Study of Labour (IZA), Bonn, Discussion Paper
- [39] Giddings, L., Meurs, M., & Temesgen, T. (2007). "Changing preschool enrolments in post-socialist Central Asia: causes and implications". *Comparative Economic Studies*, 49, 81-100.
- [40] Grootaert, C. (1997). "The determinants of poverty in Cote d'Ivoire in the 1980s". *Journal of African Economies*, 6(2), 169-196.
- [41] Gurstein, P. (2001). *Wired to the World: Chained to the Home: Telework in Daily Life*. Vancouver: UBC Press.
- [42] Silver, H. (1994). *Social exclusion and social solidarity in International Labour Review*, 133, 5-6.
- [43] Habibov. (2010). *Understanding the over-time evolution of living standard determinants in transitional countries: evidence from Azerbaijan*. *Journal of Comparative Social Welfare*, 26(1), 43-63.
- [44] Habibov, & Afandi, E. (2009). *Analysis of subjective well-being in low-income transitional countries: evidence from Armenia, Azerbaijan and Georgia*. *Journal of Comparative Social Welfare*, 25(3), 203-219.
- [45] Hagenaars, A., & Van Praag, B. (1985). "A synthesis of poverty line definitions". *Review of Income and Wealth*, 31, 139-153.
- [46] Hara, Y. (1996). *Development Economics*. Tokyo: Iwanami Shoten.
- [47] Hodinott, J. (2006). *Shocks and their consequences across and within households in rural Zimbabwe*. *Journal of Development Studies*, 42(2), 301-321.
- [48] Hoover, G. A., Formby, J., & Kim, H. (2004). "Poverty, non-white poverty, and the Sen index". *Review of Income and Wealth*, 5(4), 543-559.
- [49] Huston, A. C. (1991). *Children in Poverty: Child Development and Public Policy*. Cambridge: Cambridge University Press.
- [50] Iversen, R. R., & Armstrong, A. L. (2006). *Jobs Aren't Enough: Toward a New Economic Mobility for Low-Income Families*. Philadelphia: Temple University Press.
- [51] Jenkins, S. P. (1991). "Poverty measurement and the within-household distribution: agenda for action". *Journal of Social Policy*, 20, 457-483.
- [52] Veit-Wilson, J. (2007-2008). *House of commons Scottish Affairs committee poverty in Scotland, second report of session (Vol. 11)*.
- [53] Watts, J. (2007). "Riots and hunger feared as demand for grain sends food costs soaring". *The Guardian* (London).
- [54] Keen, M. J. (1992). *Needs and targeting*. *Economic Journal*, 102, 67-79.
- [55] LeBlanc, M. (2000). *Poverty, policy and the macroeconomy*. United States Department of Agriculture Technical Bulletin, 1889, US Department of Agriculture. Washington.DC.
- [56] Luchters, G., & Menkhoff, L. (2000). *The implicit equidistributional bias of human development*. *Poverty Reduction Journal of International Development*, 5, 613-623.
- [57] Humm, M. (1989). *The Dictionary of Feminist Theory* London.
- [58] Mincer, J. (1962). *On-the-job training: costs, returns, and some implications*. *Journal of Political Economy*, 50(5), 50-79.
- [59] Montreuil, S., & Lippel, K. (2003). *Telework and occupational health: a Quebec empirical study and regulatory implications*. *Safety Science*, 41(4), 339-358.
- [60] Mortished, C. (2008). *Already we have riots, hoarding, and panic: the sign of things to come?* *The Times* (London).
- [61] Narayan, D., Chambers, R., Shah, M., & Petch, P. (2000a). *Voices of the poor: Volume 2: Crying Out for Change (Vol. 2)*. Washington.DC: World Bank.
- [62] Nilles, J. M. (1998). *Managing Telework: Strategies for Managing the Virtual Workforce*. New York.NY: Wiley.
- [63] Noorbakhsh, F. (1998). *The human development index: some technical issues and alternative indices*. *Journal of International Development*, 10(5), 589-605.
- [64] Okurut, F. N., Odwee, J. A. O., & Adebua, A. (2002). *Determinants of regional poverty in Uganda*. Paper presented at the Research Paper 122, African Economic Research Consortium (AERC)
- [65] Osberg, L., & Xu, K. (1999). *Poverty intensity: how well do Canadian provinces compare?* *Canadian Public Policy*, XXV (2), 179-195.
- [66] Townsend, P. (1979). *Poverty in the UK*. Penguin.
- [67] Powers, E. (1995). *Growth and poverty revisited*. *Economic Commentary*, Federal Reserve Bank of Cleveland, Cleveland, OH.
- [68] Prowse, M. (2003). *Towards a clearer understanding of vulnerability in relation to chronic poverty*. Paper presented at the CPRC Working Paper
- [69] Ravallion, M. (2003). *The debate on globalization, poverty, and inequality: why measurement matters*. Paper presented at the World Bank Policy Research, Working Paper.
- [70] Ricasio, V. (2006). *Community based enterprise development*. [online] available at : www.NextBillion.net
- [71] Rowntree, B. S. (1901). *Poverty*. London: Macmillan.
- [72] Sachs, J. D. (2005). *The End of poverty: How We Can Make It Happen in Our Time*, Penguin Books. Harmondsworth.
- [73] Schultz, T. (1961). "Investing in human capital". *American Economic Review*, 51(2), 1-17.
- [74] Sen, A. (2000). *Merit and justice*.
- [75] Sharma, S. (2007). *People vs. poverty: powering through partnership*. *Futures*, 39(5), 625-631.
- [76] Shorrocks, A. F. (1995). "Revisiting the Sen Poverty index". *Econometrica*, 63(5), 1225-1230.
- [77] Simpson, L., Daws, L., Pini, N., & Wood, L. (2003). "Rural telework: case studies from the Australian outback". *New Technology, Work and Employment*, 18(2), 115-126.

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- [78] Sjaastad, L. (1962). The costs and returns of human migration. *Journal of Political Economy*, 70(5), 80-93.
- [79] Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87, 355-374.
- [80] Stigler, J. (1962). Information in the Labor Market. *Journal of Political Economy*, LXX 94-105.
- [81] Thomson, M. (2009). Zimbabwean girls trade sex for food. From BBC News
- [82] Wagle, U. (2002). Rethinking poverty: definition and measurement, *International Social Science Journal*, 54(171), 155-165.
- [83] UN. (2010). Poverty eradication. o. Document Number)
- [84] UNDP. (2008). Millennium Development Goals (MDGs). [online] available at: www.undp.org/mdg/
- [85] United Nations. (2005). Report on the World Social Situation 2005. New York.NY: United Nation's Publicationso. Document Number)
- [86] Watts, H. (1968). An economic definition of povert. New York: Moynihan, D.P.
- [87] Whiteford, P., & Adema, P. (2007).What works best in reducing child poverty: a benefit or work strategy? Paper presented at the OECD Social, Employment and Migration Working Papers.
- [88] Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2004). At Risk: Natural Hazards, People's Vulnerability and Disasters. In. London: Routledge.
- [89] World Bank. (2002). Building Institutions for Markets. New York: Oxford University Press.
- [90] World Bank. (2005). Introduction to Poverty Analysis. Washingtono. Document Number)
- [91] World Bank. (2006). Russian Economic Report o. Document Number)
- [92] The World Health Report, World Health Organization (See annex table 2). (2010). from Who.int