

CONCEPT AND MEASUREMENT OF POVERTY: INCOME AND NON-INCOME MEASURE

Nijara Deka*

Abstract

The definition of poverty is not only important to have a macro picture of the economy but is also important to deal with the problem so that genuine beneficiary of the government programme can be identified. This paper is an attempt to define poverty precisely and review different definition and measurement of poverty of different researcher and development experts. Poverty is a situation where a large section of society's population is incapable of satisfying the basic needs. The earliest definitions of poverty centered on the inability to obtain adequate food and other basic necessities. But with the passage of time many researcher and development experts continue to define the concept of poverty including different criteria and in many different ways. Concept of poverty is related to the culture, belief, habit and environmental (both social and economic) conditions of the area in which people live.

Key words: Poverty, Measurement, income, and deprivation.

* **Research Scholar, Centre for the Study of Regional Development School of Social Sciences, Jawaharlal Nehru University, New Delhi-**

1. Introduction

Though the problem of poverty is very old, still there is no general agreement on how poverty should be defined and how it should be measured. The definition of poverty is not only important to have macro picture of the economy but is also important to deal with the problem so that genuine beneficiary of the government programme can be identified. This paper is an attempt to define poverty precisely and review different definitions and measurement of poverty of different researchers and development experts. In the second part of the paper the concept of poverty is explained and reviewed. Third part gives an overview of different concepts and terms related to poverty. Causes of poverty are explained in fourth part. Fifth part analysis the measurement of poverty. Sixth part concludes.

2. Concept of Poverty

Poverty is a situation where a large section of society's population is incapable of satisfying the basic needs. It is the absolute level of living –how many people cannot attain certain predetermined consumption needs. Lack of purchasing power is universally an important element for defining poverty but some statistical offices measure purchasing power as income and others measure it as expenditures (UNSD 2005). The earliest definitions of poverty centered on the inability to obtain adequate food and other basic necessities. But with the passage of time many researcher and development experts continue to define the concept of poverty including different criteria and in many different ways. Many researchers have defined the poor as that portion of the population that is unable to meet basic nutritional needs. Others view poverty in part as a function of education and/or health, life expectancy, child mortality etc. level of expenditures and consumption and other criteria used to identify the poor. In very broader terms, poverty is a situation of being unable to meet “basic needs” where the “basic needs” includes the physical (food, health care, education, shelter etc) and nonphysical (participation, identity etc.) requirements of a meaningful life. So people are said to be in poverty when they live below a standard, which their society recognizes as a reasonable minimum. Chambers (2006) defines that dimensions of bad life included not only income-poverty and material lack but also many others. Blackwood and Lynch (1994) criticized income as the only criteria to demarcate poverty. Some of their more serious criticism includes the inability of income to capture failures in the distribution of goods/services and the consumption of government provided goods and services

that do not require personal income to purchase (e.g. education, healthcare, public transportation, etc) and they also pointed out that in spite of these shortcomings most analysis follow the convention of regarding poverty as a function of income level insufficient for securing basic goods and services.

Thus Poverty is the lack of or the inability to achieve a socially acceptable standard of living¹. In this definition “lack” represents the lack of command over economic resources; “inability” represents the capability failure to achieve the very basic (food, shelter) or complex (freedom, self-respect, social inclusion etc) functioning which makes the individual poor; and “standard of living” represents the socially acceptable standard of living by a given society at a given time. Sen (1981) has explained the concept of poverty in relation to “entitlement”. Amartya Sen said “the entitlement approach to starvation and famines concentrates on the ability of people to command food through the legal means available in the society, including the use of production possibilities, trade opportunities, entitlements vis-à-vis the state, and other methods of acquiring food. A person starves either because he does not have the ability to command enough food, or because he does not use this ability to avoid starvation.” According to him a person’s ability to command food and/or any commodity he wishes to acquire or retain depends on the entitlement relations that govern possession and use in that society. The economic definition of poverty as presented by Watts (1964) is “a property of the individual’s rather than a characteristic of the individual or of his pattern of behaviour”. The concept of poverty can be explained in two different ways, one is economic concept and other one is the cultural concept². The economic concept is defined in terms of the external circumstances which condition a person’s behavior- especially the behaviour he displays in economic transactions and the cultural concept focuses on the internal attitudes and behavior patterns which a person brings to any particular set of circumstance. This leads to the definition of poverty as a situation in which the consumption set of the individual is severely constricted, while affluence is defined as a situation in which there is little constriction of the consumption set or in other words, welfare is defined in terms of

¹ Easypol Online resource material for policy making (2005). *Impact of Policies on Poverty the Definition of Poverty*, Food and Agriculture Organization of the United Nation, FAO. Rome, Italy. Retrived 20th February, 2015, from http://www.fao.org/docs/up/easypol/317/rel_pov_lines_006EN.pdf

² Watts, H. W. (1964). *An Economic Definition of Poverty*, *Institute for Research on Poverty Discussion papers*. The University of Wisconsin, Madison, Wisconsin.

command over real goods and services³. Poverty is then defined as a situation where command over resources falls below a certain level⁴.

3. Different terminology related to poverty

There are lots of different concepts and terminology, which are related to poverty. Masika, Haan and Baden (1997) pointed out the widening debates on the concept of poverty to include more subjective definitions, such as vulnerability, entitlement and social exclusion. They further described the usefulness of these concepts for analyzing what increases the risk of poverty and underlying reasons why people remain in poverty.

The following are different concepts related to poverty

(a) Subjective and Objective Poverty

There are two notions of poverty that are often confused, objective poverty and subjective poverty. Objective poverty is the situation where the level of income below which one cannot afford to purchase all the resources one requires to live and poverty in subjective sense is people who feel some sense of deprivation resulting from their lower social standing or position near the bottom of a social hierarchy. Individuals who are subjectively poor have sufficient funds to survive but do not have as many resources as other members of their society, resulting in a sense of being poor despite having enough to survive. While there are no clear statistics on the number of people who feel some sense of subjective poverty, there is a substantial amount of information on individuals who live in objective poverty.

Adam Smith recognized more than two hundred years ago, poverty is a social construct and he explained that in defining the necessities one must include not just “the commodities, which are indispensably necessary for the support of life” but also those, which “the custom of the country renders indecent for creditable people, even of the lowest order to be without⁵. He supported his version with the example that a linen shirt is not a necessity of life. He explained that the Greeks

³ Goedhart, T., Halberstadt, V., Kapteyn, A., and Praag, V.B.(1976). The Poverty Line: Concept and Measurement, The Journal of Human Resources, Vol. XII, No. 4. Retrieved 1st December, 2016, from https://www.researchgate.net/publication/265191749_The_Poverty_Line_Concept_and_Measurement

⁴ ibid

⁵ Anand., S., Segal., P., and Stiglitz., J. E., (Eds) (2010) *Debates on the Measurement of Global Poverty* . Oxford New York: Oxford University Press.

and Romans lived very comfortably though they had no linen. But with the passes of times through the greater part of Europe, a creditable day laborer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful degree of poverty, which, it is presumed, no body can well fall into without extreme bad conduct.

(b) Absolute and Relative Poverty

Poverty may be defined either in absolute term or in relative term. Absolute poverty defined in terms of a definite income, consumption or energy level and relative poverty is defined in terms of the differences in income level or other criteria of economic life of different groups of people in a society or in an economic region. Standards may be established for 'sufficient' levels of satisfaction of needs and persons who are found to be below that standard level shall be considered poor and those found to be above them as not poor⁶. Foster, Greer, Thorbecke (1984) explained that absolute poverty is usually measured by the value, in terms of a given level of goods ensuring some from of minimum subsistence. They pointed out that the first attempt to define poverty as an absolute concept has taken into account the minimum diet cost, i.e. the minimum cost for each household to achieve a given energy intake, but this approach has two demerits, (1) minimum diet costs may vary among households as they do not all share the same preferences of nutrition patterns, (2) non-food items are not considered.

On the other hand, poverty may be determined by the position of the individual in question in relation to other members of the population in respect of the degree of satisfaction of these respective needs and that relative position shall determine whether a person is poor or not poor (Drewnowski, 1977). In relative sense, poverty is basically a phenomenon of inequality. Foster, Greer, Thorbecke (1984) also pointed out the shortcomings of relative poverty approach. According to them, if poverty is defined as a fixed percentage of some synthetic indicators of the income distribution, there will be no possibility to eradicate poverty, unless the income distribution becomes perfectly egalitarian. Sen (1983) basically rejects the relative concept of poverty, arguing that relative deprivation is essentially incomplete as an approach to poverty and supplements (but cannot supplant) the earlier approach of absolute dispossession.

⁶ Drewnowski, J., (1977) Poverty: Its Meaning and Measurement., *Development and Change*, 8, 183-208.

(c) Chronic poverty and Transient Poverty

Chronic poverty is dynamic concept where poverty trap assumes an indefinitely long time span and a person will never escape poverty unless some exogenous event helps her to break out of the trap. On the other hand, transitory poverty refers to a situation where the time path of (conditional) expected income always stays above the poverty line but sufficiently close to it that the actual income would fall below the poverty line fairly frequently (but not most of the time), if the exogenous factors remained unchanged. Addison, Hulme and Kanbur (2009) pointed out the duration aspect of time is important for defining the concept of poverty. They explained it with an example, if x has experienced the same forms and depth of poverty as y , but for a much longer period, then a moral concern with helping the more disadvantaged requires that x be prioritized and supported as she or he has experienced more deprivation than y and another example, two different countries might have the same scores for the headcount, depth and severity of poverty, apparently poverty in both of these countries is similar though the first country poverty is largely transitory and is a phenomenon that many of its population experience but only for short durations. In other country, most of the populations are non-poor but a minority is trapped in poverty for most or all of their lives. In the former country policies need to help those experiencing short spells of poverty- unemployment insurance and benefits, reskilling, microcredit, temporary social safety nets, health services. In the latter, deeper structural problems must be asset redistribution, tackling social exclusion and regional infrastructural development.

Thorbecke (2004) said that distinguishing transient poverty from chronic poverty is essential in that the type of interventions called for to alleviate each differ. Whether transitory poverty deserves as much policy attention as chronic poverty depends on the ability of individuals to buffer the harshness of temporary poverty (Duclos 2002) as for example, short-term protection against short term poverty leads to use of physical and natural resources, whose depletion can be injurious to protection against long-term deprivation. Therefore it is very important that while planning the policies for poverty alleviation, there should be proper division between the concept of chronic poverty and transient poverty.

(d) Poverty and Vulnerability

Vulnerability is the possibility of suffering, a decline in well-being in particular a drop below some minimum benchmark or poverty threshold and these are brought about by shocks against

which protection is either costly or not possible. Vulnerability is not synonymous with poverty, but it refers to defenselessness, insecurity and exposure to risk, shocks and stress; and vulnerability can be reduced by assets, such as: human investment in health and education; productive assets including houses and domestic equipment; access to community infrastructure; and international community for resources at times of need (Masika, Haan and Baden, 1997). The measurement of vulnerability is particularly important for monitoring the well being of poor, because, the outcome of vulnerability are typically harsher on poor and poor are also often more vulnerable because of their location and their characteristics, including a lower level of assets to protect them, less access to public protection and a lower level of empowerment⁷.

(d) Poverty and Entitlement

The concept of entitlement can be defined as a guarantee of access to benefits based on established rights or by legislation. According to Sen, a person's ability to command food and/or any commodity he wishes to acquire or retain depends on the entitlement relations that govern possession and use in that society. Masika, Haan and Baden (1997) also described the concept of entitlement as the complex way in which individuals or households command resources, which vary between people over time in response to shocks and long-term trends. Sen (1983) also pointed out that food as one of the most primitive property rights, and in each society there are rules governing this right. The entitlement approach concentrates on each person's entitlements to commodity bundles including food, and views starvation as resulting from a failure to be entitled to a bundle with enough food.

(e) Poverty and Social Exclusion

Poor people are excluded from the normal social life, not because they don't want to participate in social life, but because it is unaffordable and unachievable for them. According to Masika, Haan and Baden, (1997) social exclusion is seen as a state of ill-being and disablement or disempowerment, inability which individuals and groups are denied access to goods, services, activities and resources which are associated with citizenship. Poverty and exclusion are two

⁷ Duclos., J.Y., (2002) Vulnerability and Poverty Measurement Issue for Public Policy. *Discussion Paper, World Bank Institute.*

different concepts. Poverty is a distributional outcome whereas exclusion can be defined as process of declining participation, solidarity and access.

4. Causes of Poverty

Poverty is an exceptionally complicated social phenomenon, and trying to discover its causes is equally complicated. Poverty has many causes, and some of them are very basic, for instance the world has too many people, too few jobs and not enough food. But such basic causes are quite intractable and not easily eradicated. In most cases, the causes and effects of poverty interact, so that what makes people poor also creates conditions that keep them poor. Primary factors that may lead to poverty include overpopulation, the unequal distribution of resources in the world economy, inability to meet high standards of living and costs of living, inadequate certain economic and demographic trends and welfare incentives.

Schiller (1973) explained the different causes of poverty in a very systematic way. He divided the causes of poverty in three different heads labour market forces, demographic forces and institutional forces. The following are some important causes of poverty pointed out by Schiller.

1. Poverty is a relatively common occurrence to those who work little or not at all. “The phenomena of unemployment, discouragement and underemployment combine to form the concept of sub employment. Taken as a whole, the distressing impact of sub employment on a family’s finances is reasonably clear; very few families have enough economic resources to maintain themselves in the face of these forces for long. What is not so obvious is that the social foundation of the family, as well as its economic foundation, may suffer from the impact of these phenomena.”(ibid). It is generally seen that the employment and unemployment status of the poor is not the consequences of their failure to seek employment but it is determined large part by the decisions society makes regarding the utilization of economic resources.

2. Schiller also included some important causes of poverty under the head of demographic forces. Poverty among the aged is not a natural product of biological development. Rather it emerges from a diminution of income sources, a lack of accumulated resources, and the imposition of extraordinary property and health expenses. Maintaining income sources or providing financial relief from taxation and illness will effectively prevent many aged

individuals from falling into poverty. For others, however, poverty does not emerge in old age but is, instead a continuing condition. The causes of poverty for these people must be sought elsewhere and earlier. Identifying and eliminating the causes of poverty for the non-aged will help to prevent later poverty among the aged.

3. Again, the relationship between health and income status is not simple enough. Just as illness may tend to deplete a family's resources and leave it poor, so may poverty itself increase the likelihood of getting sick. Poor families suffer notoriously from chronic malnutrition and unsanitary environments, both of which effectively nurture ill health. As a consequence, they are apt to be ill or disabled more often than the nonpoor. Poor families have markedly higher disease and mortality rates and miss more than twice as many days of work due to illness than do the nonpoor.

4. Large number of children constitutes a sizeable drain on family resources. Childbearing and rearing thus make it either physically impossible or economically unrewarding for many mothers to participate in the labour force. Confronted with more needs and fewer resources, many large families are unable to fend off poverty. A one- parent family is severely handicapped in the effort to attain economic security. Potential family income is reduced by more than half with the departure of one parent. Where two parents exist in the family, one parent can devote full time to labour market activity. When only one parent resides in the family, such flexibility is diminished. Hence the potential net income of a one-parent family is often closer to one-third rather than to one-half of a two-parent family's income. Moreover, economic insecurity itself may have contributed to the dissolution of the family or to excessive reproduction. Hence, strong causality appears to flow from poverty to family size and status than in the opposite direction

5. The poor are impoverished because their 'culture' prevents them from taking advantage of opportunities to escape poverty. If the poor are culturally bound to poverty, then the task of eliminating poverty becomes infinitely more difficult and time-consuming.

6. The children of the poor undeniably drop out of school earlier than other children. Schools in lower-income areas are notoriously ill-equipped to transmit interest, enjoyment, or ability in the learning process. Middle-class school experience is both more pleasant and more profitable.

7. The relationship between education and income is equally effective in separating the poor from the nonpoor. Higher educational attainment contributes to income in several ways: it increases a person's productivity by expanding his knowledge and skill, and prospective employers tend to regard it as indicative of commendable diligence. Educational attainment affects every facet of labour market success. A person's participation in the labour force, his occupation, the frequency of his employment, the number of hours he works and the wage rate he receives are all affected by the schooling he has achieved. However, even if on average, better-educated individuals earn more money, it does not follow that all persons with schooling will have higher incomes, for the simple reason that education is not the only determinant of income. Inherent ability, inherited wealth, geographical location, discrimination, economic conditions and simple luck will all influence a person's income opportunities.

8. Poor children are maintained in schools segregated largely by socioeconomic class and provided with substandard facilities. They and their families are also stigmatized by the larger community for failure to attain material success. As a result children of poor families drop out of school at alarming rates and generally lag behind nonpoor children in demonstrated achievement.

9. Class discrimination in the labour market means that poor job-seekers have less chance to obtain employment than nonpoor job-seekers of equal ability. Discrimination takes place as a result of individual prejudices and institutionalized practices. The nonpoor have many personal characteristics and background unfamiliar to middle-class employers, employment agencies and even unions. Conduct, speech and dress are among those factors that create communication barriers. Employers tend to see these differenced as indicators of ability rather than as the result of socioeconomic environment. It is assumed that the poor will not be as able or dependable on the job. Hence, workers are not sought from poorer areas and, when they come forth, are unfavorably considered.

These are some important causes of poverty according to Schiller, but poverty may be caused many other reasons too.

5. Measurement of Poverty

In all cultures and through history, there is a rich vocabulary of the concept, measurement and also about the causes of poverty. The first paper written and published specifically about poverty was by Charles Booth. The fundamental work that he took was an inquiry that he planned, organized and funded, only for the sake of a rigorous and trustable description, from 1886 to 1903, with more than 120,000 households and the final publication of his inquiry would consist in a set of 17 volumes (Charles Booth, 1903), is considered, even nowadays, not only at a scientific level, as also one of the most complete social surveys of London. Booth shows the living condition as well as the condition under which the people of the London work. For this purpose the whole population of Tower Hamlets (a London borough to the east of the City of London and north of the River Thames) was divided into about forty sections, according to the character of the employment of the heads of families and a re-division was then made by apportioning the people in each section among eight classes, according to means and position. The grouping of the sections into classes was facilitated by considering the proportion of poor and very poor in each section. By “poor” he meant those who have a fairly regular though bare income and he would define as “very poor” those who fall below this standard, whether from chronic irregularity of work, sickness, or a large number of young children. To describe the cohort of families that was under the category of ‘the poor’, Booth used an income poverty line which he called ‘line of poverty’. Booth considered that the contact with real life is important to understand it and to describe it and also important is his distinction between poverty and unhappiness, once that it alerts social economists and other social scientists not to treat both as the same.

After Booth, General Francis Amasa Walker would be the author of the first paper about poverty written not for political or merely social motivation, but for academic reasons. Francis Walker (1897) in this work, distinguished poverty from pauperism, explaining the causes of the latter concept. He also criticized the existent of explanations for the existence of poverty, from the theological to the socialist, as those from several independent personalities. Walker criticized

that one-cause explanations were not sufficient to explain poverty, proposing his own explanations for poverty, which are basically four: the hard naturally established conditions of the humankind; a secondary poverty which results from industrialization (as, for example, the division of labour); the existence of the great social and industrial law and, finally, the carelessness, lack of frugality and bad habits on the part of the working-classes. His final comments go for suggesting that the cure for poverty may come from the treatment of mental and moral disease as well as from a bigger sensibility for popular education.

In 1901, Benjamin Rowntree has done another fundamental study on poverty and according to him poverty is a structural rather than merely a behavioral problem. Rowntree was much more influent in the scientific discussion about poverty. Rowntree applied a reasonable level of complexity in the derivation of a poverty line; particularly in the estimation of the minimal food requirements for upholding efficiency, on the basis of lately calculated nutritional standards. Such minimal requirements, together with those necessary for the purchase of clothing and rent, were added up to identify a poverty line, so that households whose income level fell below it were considered to be in “primary poverty”, or in other words, primary poverty was present where the family lacked sufficient earnings to obtain even the minimum necessities. Rowntree also introduced the distinctions between primary and secondary poverty. According to him, primary poor are those whose total earning are insufficient to obtain the minimum necessities of life for mere physical efficiency and in secondary poverty are those, whose earning would be sufficient for the maintenance of merely efficiency were it not that some portion of it is absorbed by other expenditure, either useful or wasteful. Rowntree, who popularized the concept of poverty line, defined it as a standard of bare subsistence rather than a living. He derived a poverty line as a heuristic device - rather than a normative device prescribing planned patterns of expenditure.

In 1901, Dadabhai Naoroji also brought out contributions about poverty. Naoroji wrote a book in which he signaled the beginnings of the Indian Nationalist struggle against the British rule. Naoroji said, “Indian resources had been exhausted by British policy—which was thus responsible for the famines. It had been suggested that India should look more to manufacturing industries and be less dependent upon agriculture. But it seemed to be forgotten that the Indian

industries had been destroyed by the British policy. India was originally noted for her industries. Venice and other ancient cities acquired great wealth through their trade with India, but Great Britain had deprived them of their life blood, and they could no longer carry on their industries because they had no means wherewith to maintain them.” He argues that the principal cause of poverty in India is the drain of wealth, or the unilateral transfer of resources from India to Britain, when Britain, for example, puts the average tax burden in India at twice that of contemporary England, although average income there was fifteen times greater at that point in time.

Again Peter Townsend, 1954 suggests that selecting from all those households that satisfy nutritional requirements, the quarter of households that do so at the lowest level of income, and to take total average expenditure per household in this group (less some fixed costs), as the poverty line. He pointed out that the method is a method of measuring the extent of malnutrition not attributable to wasteful spending, but it would give the fairest index of poverty, particularly if the results gained by its use were correlated with other findings based on standards of overcrowding, household amenities, and education and so on. Then in 1962, Michael Harrington’s book “The Other America” would be one of the most important books on the issue of poverty. This book is a critic for what he believed was an implicit policy of hiding poverty in America and for the consequent no importance given to the avoidable distress of the poor. He also mentioned that clothes make the poor invisible, America has the best-dressed poverty the world has ever known and if there is a technological advance without a social advance, there is, almost automatically, an increase in human misery.

After Harrington, W. Anderson (1964) wrote another major work about the poverty in America. In his article, he mainly search the solution of the question that in the context of a growing America if growing would necessarily be poor-favourable and the concept of trickle-down effect, which is the dispersion of economic gains from the rich to the poor. Anderson tries to measure the variations in the strength of the trickle-down effect by connecting economic growth with the rightward movement of a lognormal income distribution. He finds that the poverty reduction effect of growth increases with growth, albeit it should increase at a decreasing rate because of the non-linear tail effects of the distribution of income, what suggests that the poverty reduction

effect of high growth may take place partly in the course of inequality reduction effects. In fact his work suggests that economic growth helps to ease poverty in two ways, as increased growth will enlarge both the number of jobs and the real wage paid to workers. Even though growth first and foremost benefits those in the upper portions of the income distribution, sufficiently robust growth benefit even those in the lower portions. The idea is that a sufficiently large growth rate has a more than proportional effect on the poverty rate. Anderson used the term “poverty curve” to refer to the curve defining the proportion of families in the United States with incomes below \$3000 as a function of the log of median income for the period 1947-60. His paper is also of interest since it also shows poverty curves for sub-groups of the American population - rural and urban, white and non-white - over this period, indicating how specific sub-groups may not follow the general trend. However, Peter Townsend, in 1979, discusses the previous definitions of poverty and selected evidence about poverty and inequality. He argues that the definitions expressed in terms of some absolute level of minimum needs, though being historically the most influential, are inappropriate and misleading, on the basis that people’s needs are conditioned by the society in which they live and to which they belong. After that, in 1970s, the concept of poverty is shifted from income poverty to a wider set of ‘basic needs’, including health, education and other services. D. Morris constructed a composite Physical Quality of Life Index (PQLI) during 1979. He combined three component indicators of Infant Mortality, Life Expectancy and Basic Literacy to measure performance in meeting the basic need of the people. Then Amartya Sen has also several important articles and books on the Economics of Poverty. Starting from “On the Economic Inequality” in 1973 till today, Amartya Sen contributed a lot to the economics of world poverty.

In the international development community, there is an important idea of an international poverty line of around \$1 a day. The \$1-a-day line aims to judge poverty in the world as a whole by the standards of what poverty means in poor countries. The origin of the \$1-a-day poverty line is one paper of Ravallion et al. (1991). The ‘\$ 1-a-day’ line aims to judge poverty in the world as a whole by the standards of what means in poor countries. Ravallion (2010) mentions that having set an international poverty line, and then it is converted back to local currency using the same PPPs. The best available consumer price indices (CPIs) are then used to convert the international line in local currency to prices prevailing at the time of the surveys.

Poverty line is the most basic measure of poverty in all over the world. Poverty lines are generally defined as the per-capita monetary requirements an individual needs to afford the purchase of a basic bundle of goods and services. Another concept, which is related to the poverty line, is the Head-Count ratio. Head Count Ratio describes the percentage of the population whose per capita incomes or expenditures are below the poverty line.

But poverty has not only one dimension of deprivation but also have many dimensions of deprivations. The lives could be prematurely shortened, made hard, painful or hazardous, deprived of understanding and communication and robbed of dignity, confidence and self-respect and lead that poverty manifests itself (Anand and Sen 1997). Income based poverty measures concentrates exclusively on deprivation in one variable in particular viz. income.

To include more than one dimension in measurement of development or deprivation, Human Development Report introduced a new measure of development in 1990, i.e. Human development Index (HDI). It combines three basic dimensions of human development: (1) A long and healthy life, as measured by the life expectancy at birth, (2) knowledge, as measured by the adult literacy rate (with two-third weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight) and (3) A decent standard of living, as measured by GDP per capita in purchasing power parity (PPP) terms in US dollars. The HDI was the first recognition that development or deprivations are much more than just the expansion of income and wealth. In order to solve the problem in measuring poverty, in 1997, another index was introduced in Human Development Report that is Human Poverty Index (HPI). HPI bring together in a composite index the different features of deprivation in the quality of life to arrive at an aggregate judgment on the extent of poverty in a community. It measures deprivations in the HDI: (1) A long and healthy life- vulnerability to death at a relatively early age, as measured by the probability at birth of net surviving age 40, (2) Knowledge-exclusion from the world of reading and communication, as measured by the adult illiteracy rate and (3) A decent standard of living- lack of access to overall economic provisioning, as measured by the unweighted average of two indicators, the percentage of the population without sustainable access to an improved water source and the percentage of children under weight for age. But UNDP itself criticized both HDI and HPI for its high incompleteness and incapability to capture many of the

dimensions of a full life and also the social conditions that are necessary. Neither the HPI nor HDI include Sen's five 'instrumental freedoms' as essential to a life of dignity. Sen's 'instrumental freedom' includes economic facilities, social opportunities, political freedom, security and transparency guarantees.

In 2010, UNDP introduced the inequality-adjusted HDI (IHDI). It is a measure of the level of human development of people in a society that accounts for inequality. The IHDI accounts for inequalities in HDI dimensions by "discounting" each dimension's average value according to its level of inequality. The IHDI is the actual level of human development which accounts for inequality in the distribution of achievements across people in a society and the IHDI and HDI will be equal if there is no inequality in the distribution of achievement across people in society and IHDI falls below the HDI as inequality rises. After that the most recent development in the measurement of poverty is the Multidimensional Poverty Index (MPI). The MPI identifies multiple deprivations at the individual level in health, education and standard of living. In MPI each person in a given household is classified as poor or nonpoor depending on the number of deprivations his or her household experiences. These data are then aggregated into the national measure of poverty. The MPI addresses how many people experience overlapping deprivations (incidence) and how many deprivations they face on average (intensity) and it can be broken down by indicator to show how the composition of multidimensional poverty changes for different regions, ethnic groups and so on- with useful implications for policy⁸. The Oxford Poverty and Human Development Initiative (OPHI) of Oxford University and the Human Development Report Office of the United Nations Development (UNDP) launched in July 2010 a new poverty measure that gives a "multidimensional" picture of people living in poverty.

6. Conclusion

Though there are different definition and explanation related to poverty, poverty is a context specific definition. Concept of poverty is related to the culture, belief, habit and environment (both social and economic) conditions of the area in which people live. In different time period different experts give different measure of poverty. In the beginning poverty was measured

⁸ Human Development Report: Multidimensional Poverty Index (MPI). (n.d.). Retrieved 5th January 2012, from <http://hdr.undp.org/en/statistics/mpi>

basically by determining the poverty threshold. Now it is highly debated in that poverty should be measure not taking only one line deprivation i.e. income, but should take other deprivation related to a decent life. Because a person might not fall below the income or expenditure based poverty line but he or she might live in acute deprivation in other dimension of life. So a poverty line or a measurement must include those dimensions of life, which made a human life reasonably livable, and at the same time justifiable in the society.

Reference:

- Addison., T., Hulme., D., and Kandur., R. (2009) Poverty Dynamics Interdisciplinary Perspectives. Oxford University Press. New York
- Anand., S and Sen., A. (1997). Concept of Human Development and Poverty: A Multidimensional Perspective. Human Development paper 1997. Retrieved 12 January 2012 from <http://ias7.berkeley.edu/Academics/courses/center/fall2007/sehnbruch/UNDP%20Anand%20and%20Sen%20Concepts%20of%20HD%201997.pdf>
- Anand., S., Segal., P., and Stiglitz., J., E., (2010). Debates on the Measurement of Global Poverty. Oxford University Press. New York.
- Anderson., W. H. L. (1964) Trickle Down: The Relationship Between Economic Growth and The Extent of Poverty Among American Families. The Quarterly Journal of Economics. Vol.LXXVII. No.4
- Atkinson., A. B. (1969) On the Measurement of Inequality. Journal of Economic Theory 2, 244-263
- Atkinson., A. B. (1987) On The Measurement of Poverty. Econometrica, Vol. 55, No. 4, pp. 749-764
- Blackwood., D. L. and Lynch., R. G. (1994) The Measurement of Inequality and Poverty: A Policy Maker's Guide to Literature. World Development. Vol.22, No.4, 567-578.
- Booth., C.,(1887) The Inhabitants of Tower Hamlets (School Board Division), Their Condition and Occupations. Journal of the Royal Statistical Society, Vol. 50, No. 2, 326-401

- Bron, A. and Kristiansen, A. (2009) Urban Policies the Right to the City: Right, Responsibilities and Citizenship. UN-HABITAT and UNESCO; [Online] Available: www.un-habitat.org
- Dandekar., M.V., (1981) On the measurement of Poverty. Economic and Political Weekly. Vol.16, No.30, 1241-1250
- Deaton., A., (2003) How to Monitor Poverty for Millennium development Goal. Journal of Human Development, Vol.4, No.1.
- Desai., M., and Saha., A. (1988) An Econometric Approach to the Measurement of Poverty. Oxford Economic Papers, New Series, Vol. 40, No. 3. 505-522
- Drewnowski., J., (1977) Poverty: Its Meaning and Measurement., Development and Change, 8, 183-208
- Duclos., J.Y., (2002) Vulnerability and Poverty Measurement Issue for Public Policy. Discussion Paper, World Bank Institute.
- Easypol Online resource material for policy making (2005). Impact of Policies on Poverty the Definition of Poverty, Food and Agriculture Organization of the United Nation, FAO. Rome, Italy. Retrived 20th February from http://www.fao.org/docs/up/easypol/312/povanlys_defpov_004en.pdf
- Foster., J., Greer., J. and Thorbecke., E (1984) A Class of Decomposable Poverty Measures. Econometrica, Vol. 52, No. 3, 761-766
- Goedhart, T., Halberstadt, V., Kapteyn, A., and Praag., V.B.(1976). The Poverty Line: Concept and Measurement, The Journal of Human Resources, Vol. XII, No. 4. Retrieved 21 February from <http://www1.fee.uva.nl/scholar/fellows/vanpraag/goedhart%20halberstadt%20kapteyn%20vanpraag.pdf>
- Harrington., M., (1962) The Other America Poverty in the United States . The Macmillan Company. New York
- Jayaraj., D., and Subramanian., S. (2010) Poverty, Inquality, and Population. Oxford University Press, New York.
- Local Education Report (2002) Urban Poverty and Basic Education Deprivation, National Institute of Advanced Studies. Bangalore.

- Lasserre. A.D. (2006), Informal Settlements and The Millennium Development Goals: Global Policy Debates on Property ownership and Security of Tenure. Global Urban Development Volume 2 Issue. Retrieved 18th January 2012 from <http://www.globalurban.org/GUDMag06Vol2Iss1/Durand-Lasserre.htm>
- Masika, R., Haan., A. de and Baden., S. (Oct. 1997) Urbanization and Urban Poverty: A Gender Analysis. BRIDGE (development-gender) Institute of Development Studies, University of Sussex, and Brighton BN1 9RE, UK [Online] Available: <http://www.ids.ac.uk/bridge>.
- Maxwell., S., (1999) The Meaning and Measurement of Poverty. Odi Poverty Briefing.
- McMichael., A. J. (2000) The urban environment and health in a world of increasing globalization: issues for developing countries. Bulletin of the World Health Organization, 2000, 78 (9) World Health Organization 2000
- Mohanty., A. K. and Misra., G. (Eds) (2000) Psychology of poverty and Disadvantage. Concept Publishing Company, New Delhi
- Monitoring ADB's Poverty Reduction Impact. (2006). Poverty Handbook Analysis and Processes to Support ADB Operations: A Working Document. Asian development Bank (ADB): Author. Pg no. 91; www.adb.org.
- Moynihan., D. P., (Ed) (1968) On understanding Poverty Perspective from the Social Sciences. Basic ook, Inc., Publishers. New York.
- Naoraji., D. (1901) Poverty In India
- Poverty in Focus (2006) United Nation Development Programme. International Poverty Centre. Brazil: Author
- Ravallion., M., (1992) Poverty Comparison A Guide to Concepts and Methods. Living Standards Measurement Study Working Paper No. 88. World Bank
- Ravallion., M., (1992) Poverty Line Theory and Practice. Living Standards Measurement Study Working Paper No.133. World Bank
- Ravallion., M., (2003) The Debate on Globalization, Poverty and Inequality: Why Measurement Matters. International Affairs (Royal Institute of International Affairs), Vol. 79, No. 4(Jul., 2003), pp. 739-753
- Rowntree., B. S. (1901) Poverty A Study of Town Life. Macmillan and Co. London.

- Satterthwait., D. (Nov.,2003) The Links between Poverty and the Environment in Urban Areas of Africa, Asia and Latin America. *Annals of the American Academy of Political and Social Science*, Vol. 590. pp. 73-92; Sage Publications; [Online] Available: <http://www.jstor.org/stable/3658546> [Accessed: 06/05/2009]
- Satterthwaite., D (2004) The Under-estimation of Urban Poverty in Low and Middle-income Nations. Human Settlements Working Paper Series Poverty Reduction in Urban Areas No. 14. IIED, London.
- Sen., A., (1981) *Poverty and Famines*. Oxford University Press, New York.
- Sheng Y K, (n.d) Poverty Alleviation through Rural-Urban Linkages: Policy implications, Chief, Poverty Reduction Section Economic and Social Commission for Asia and the Pacific, Bangkok. Retrieved 18th January 2012 from <http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/Rural-Urban%20Linkages/Rural-Urban%20Linkages-policyimp.pdf>
- Subramanian., S. (Ed) (1997) *Measurement of Inequality and Poverty*. Oxford India Press. New Delhi.
- Special Project on Poverty Statistics (2005) *Handbook on Poverty Statistic: Concepts, Methods and Policy use*. United Nation Statistics Division.
- Thermstrom., S. (1964) *Poverty and Progress*. Centre for Urban Studies of the Massachusetts Institute of Technology and Harvard University.
- Thorbecke., E., (2004) *Conceptual and Measurement Issues in Poverty Analysis*. WIDER, United Nation University.
- Thorbecke., E., (2005) *Multi-dimensional Poverty: Conceptual and Measurement Issues*. Paper prepared for The Many Dimensions of Poverty International Conference, UNDP International Poverty Centre, Brasilia, August 29-31, 2005
- Townsend., P., (1954) *Measuring Poverty*. *The British Journal of Sociology*, Vol. 5, No. 2. 130-137
- Townsend., P., (1979) *Poverty in The United Kingdom*. University of California Press, Berkeley and Log Angeles.
- Watts, H. W. (1964). *An Economic Definition of Poverty*, Institute for Research on Poverty Discussion papers. The University of Wisconsin, Madison, Wisconsin

- Walker., F. A. (1897) The Causes of Poverty . The Century Magazine, December 1897 210-216
- Yitzhaki., S., (2002) Do We need a Separate Poverty Measurement ?. European Journal of Political Economy. Vol. 18. 61– 85
- Zheng., B. (2001) Statistical inference for poverty measures with relative poverty lines. Journal of Econometrics 101 337-356.