

Poverty, Inequality and Development: A Note on the Concepts, Approaches and Measures

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Abstract

Beginning in the nineteen-seventies, the debate on poverty-inequality-development has been still running and manifold issues have been unfolding. This paper is aimed to categorically-understand the development discourse of the last forty years. It has been tried to penetrate the paradigm-shift in the understanding of poverty and development, which came into being in the seventies with incorporation of value-judgments in the measurement of poverty and inequality, critique on “growth” and “utilitarian” fundamentals, introduction of the concepts of asymmetric information, and was subsequently sharpened through Sen’s Capability approach and the Human Development Index. Also, it has been attempted to understand the dominant discourse at policy and applied level in the eighties and nineties - “empowerment”, “participation”, “gender”, “risks and vulnerability”, etc. Finally, the paper highlights the emerging questions in the poverty and development literature during last one decade.

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1. Background and Objective

Development had long been confined to the notion of “*Pareto Optimality*” and the “*Social Welfare Function*” in perfectly competitive market-equilibrium². Such a notion of *Development*, in traditional *Welfare Economics*, was built upon the neo-classical philosophy and Benthamite principle of maximizing total welfare of the society, in which society’s total welfare is an increasing function of individual *utility*. The assumption was that the free-market is the only safe route to achieve both “*equity*” and “*growth*” and that any government intervention imposes a deadweight-efficiency loss in the form of policy-induced distortions. *Pareto optimality* as a collective choice rule thus held that it is efficient, fair, and neutral, and so it is un-improvable. Thus the traditional *Welfare Economics* did not allow room for distributive justice (Naqvi Syed N H 2003).

In the 1940s, with *Development Economics* being a new discipline, there was a shift of emphasis towards attaining higher growth rates in a dynamic setting, although not breaching the fundamental foundation of neo-classical development philosophy. *Development* came to be interpreted with sustained annual increase in real per capita income or rapid industrialization. “*How to maximize growth*”, became the cornerstone of the debate – the so called “*growth fundamentalism*”, pioneered through the works of Rosenstein-Rodan (1943), Harrod (1939), Domar (1946, 1957), Solow (1957), Lewis (1954), Hirschman (1958), Mahalanobis (1953), and also a few others³. A basic tenet of such growth models was that of accelerating the economic progress of a country through raising the savings rate and lowering the capital-output ratio.

However, such notion of *Development*, the objective of which was attaining the *Pareto optimality* and a *Social Welfare Function* on the one hand, and maximizing *growth* on the other, came to be challenged in the 1970s. It was in the context that

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2. Pareto optimality refers to economic efficiency which can be objectively measured, named after Italian economist, Vilfredo Pareto (1848-1923). It refers to a situation when it is impossible to make anyone better-off without leaving someone worse-off. For the attainment of Pareto optimality, three marginal conditions must be satisfied: (i) efficiency in consumption: marginal rate of substitution between any two goods must be equal for all consumers; (ii) efficiency in production: marginal rate of technical substitution between any two inputs must be same for the production of all commodities; and (iii) efficiency in the product mix: marginal rate of product transformation be equal to the marginal rate of substitution between any two goods. Social Welfare Function is a tool used to determine the welfare- maximizing state of the society. Just as the individuals' preferences can be ranked among different combinations of commodities, social priorities can also be ranked in terms of alternative national combinations of commodities (details of such concepts are available in standard microeconomic text books).
 3. Discussions on growth models are available in standard textbooks of Development Economics.

a number of countries, in spite of achieving high growth rates of per capita income, did not show expected improvement in reducing unemployment and inequality and enhancing the real income of bottom 40% of their populations. Since then the concept of *Development* came to be broadened, both in the philosophical and theoretical fronts as well as in the fronts of application and policy debate. Thus beginning in the 1970s and continuing to date, a variety of concepts, approaches and measures have been suggested in the analysis of poverty, inequality and development, which are not so easy to capture in a cohesive way. It is also not easy to discern the different concepts and approaches from one another due to their cross-cutting nature. The present paper is aimed to review, analyze, synthesize and summarize the major advancements in the poverty-inequality-development literature during the last forty years and to identify the emerging issues pertinent to the debate.

2. Conceptual Advancement: 1970s – mid 1980s

As outlined in Kanbur R (2003), the progress in understanding and measurement of poverty in the 1970s to the mid-1980s can be conceptualized into four areas:

First, Advancement in the Measurement of Inequality and Poverty: Such improvements came with the introduction of value judgments on distributional issues. Given the limitations of the conventional poverty and inequality measures, like Head Count Index (HCI) and traditional Gini Coefficient⁴, a number of indices were suggested (Atkinson A B 1970, Sen A K 1976, Foster J, J Greer and E Thorbecke 1984), etc. For example, the FGT index⁵ suggested a generalized

4. Head Count Index (HCI) measures poverty in terms of the number of those who earns, or spends, or consumes below a threshold level of income, or expenditure, or food consumption basket. It is defined as: $H=q/n$; where q =poor households, and n =population. For HCI, the transfer axiom need not hold. If a very poor person far below the poverty line transfers sufficient money to a person just below the poverty line, and as a result, the less poor person reaches above the poverty line, HCI registers less poverty. Again, HCI cannot say whether most poor people fall just below the poverty line or away from the line, thus gives equal weights in both cases. Gini Coefficient is an aggregate inequality measure and is computed by the ratio of the area between the diagonal and the Lorenz curve divided by the total area of the half square in which the curve lies. The value of Gini can vary from 0-1. A value of the Gini between 0.5- 0.7 indicates highly unequal distribution while that ranging 0.2- 0.35 indicates relatively equitable distribution.

5. The index is named after James Foster, Joel Greer, and Erik Thorbecke (1984). It is given by: $P = 1/n \sum (G_j / z)^a$, where n = total population, q = the number of poor, z = the poverty line, and G_j = food expenditure shortfall of the j th individual ($j = 1, 2, \dots, q$). If "a" is low, FGT metric weights all the individuals with incomes below the poverty line as the same. If "a" is high, those with the lowest incomes are given more weight in the measure. The higher the FGT statistic, the more poverty there is in an economy.

measure of poverty by combining the extent of poverty (*headcount* ratio), the intensity of poverty (*total poverty gap*⁶) and inequality among the poor (the Gini and the coefficient of variation for the poor). The index satisfies both the monotonicity and distributional sensitivity axioms.⁷

Second, *Debate on Utilitarianism*: Such debates were centered to the shortcomings of *utilitarian* fundamentalism. At least, three important approaches emerged in the process

of the debate – (i) Nozick’s theory of entitlement suggested three types of justice namely, *justice in acquisition*, *justice in transfer*, and *rectification of injustice* (Nozick R 1974). This theory called for a strong system of private property and free-market economy and held that taxing on the rich to finance social programs for the poor are unjust; (ii) Rawlsian Collective Choice rule rejected the *Pareto optimality* and *utilitarian* philosophy and suggested two principles for maximization of social welfare – “*Justice as Fairness*” principle held an equal distribution of “*primary social goods*” (e.g., liberty, opportunity, income and wealth, and bases of self respect) ; and the “*Difference Principle*” held the maximization of the worst-off individuals in the society (Rawls J 1971, Naqvi Syed N H 2003); and (iii) Sen’s *Capability* approach suggested for the transformation of the characteristics of commodities into individuals’ capability to function (Sen AK 1976, 1985, 1987, 2000; a discussion of the of the *Capability* approach is presented in the next section of this paper).

Third, *Social Interactions in the Generation of Poverty*: It highlighted that in presence of imperfect and asymmetric information, market economy can produce multiple equilibrium, some more efficient and more equitable than others, and that public action is necessary to move from the bad equilibrium (Stiglitz J 1974). Thus a number of important concepts were introduced like *moral hazard*, *strategic behaviour*, *principal-agent problem*, etc.

6. Poverty gap measures the total amount of income necessary to raise everyone who is below the poverty line up to that line. Total poverty gap (TPG) is defined: $TPG = \sum_{i=1}^H (Y_p - Y_i)$, where Y_p = Poverty line income, Y_i = Income of i-th poor, and H =Number of poor.

7. The axioms used for comparing alternative poverty situations are: (i) Focus axiom: Only those below the poverty line are relevant. Income, consumption or well-being of the rich is not considered; (ii) (Strong) Transfer axiom: Other things being equal a transfer of income etc. from a poor to a less poor person will increase poverty; (iii) (Weak) Transfer axiom: A transfer of income etc. from a poor to a less poor person will not decrease poverty; and (iv) Monotonicity axiom: Other things being equal, a reduction in the income of a poor person must increase poverty.

Fourth, *Gender and Intra-household Issues* stated that the “unitary” models of the household cannot explain the evidence on deprivation among females in the developing countries (Sen A K 1984; gender and intra-household issues will be discussed detail in later section).

3. Understanding Poverty: Sen’s Capability Approach and the Human Development Index

According to Sen, *Development* is to be conceived in terms of “functioning” – i.e., what a person does with the commodities of given characteristics, rather than having access to the commodities themselves. Therefore, it is not just the characteristics of commodities which matters, (as in the *utilitarian* approach), rather what one can do with that matters for his/her well-being. For example, a book is of little value to an illiterate person; or an apple would mean the same to a person with parasitic disease.

While criticizing the traditional *Welfare Economics*, Sen argues, “*Maximizing the sum of individual utilities is supremely unconcerned with the personal distribution of that sum. This should make a particularly unsuitable approach to use for measuring or judging inequality*”. Sen argues that, person B who is disabled derives half as much utility from any level of income as person A, who is in full health. Thus according to Sen, with a given total income, more should be given to B, whereas a *utilitarian* solution would give more to A. He goes on arguing, “*One of the extraordinary features of standard welfare economics has been the neglect of information about health, morbidity and longevity. Though these variables have often been taken seriously in the development literature....., they have typically been ignored in typical welfare-economic treatises*” (Sen AK, cited in Atkinson AB 1999).

Sen identifies five sources of disparity between the measured real-incomes and actual advantages derived from those: (i) *Personal heterogeneity* is related to a person’s disability, illness, age, gender etc; (ii) *Environmental diversities* refer to different types of heating and clothing requirements in the cold, circumstantial differences due to infectious diseases in the tropics etc; (iii) *Variation in social climate* is associated with the prevalence of crime and violence, social capital, etc; (iv) *Differences in relational perspectives* exemplifies the difficulty to function socially, in a richer society, without certain commodities like telephone, television, automobile, etc; and (v) *Distribution within the family* signifies that the economic statistics on household resources may not reflect uneven distribution of resources among its members. Thus according to Sen, looking at

the real income levels or even the level of consumption of specific commodities cannot suffice as a measure of well being. He proposed that the assessment of the standard of living should focus on “*neither commodities nor characteristics, nor utility, but something that may be called a person’s Capability - the freedom that a person has in terms of the choice of functioning.....and his command over commodities*” (Sen A K 1985 2000; Todaro M P and S Smith 2008).

The *capability* approach may be detailed in terms of: (a) actual *chosen* functioning, and (b) *options* one has - “*capability set*”. Suppose two people are starving - one due to lack of access to food and the other due to choice on account of religious beliefs. *Actual functioning* is concerned with outcomes (i.e., starvation in both cases) and is closer to traditional *welfare economics*. However, this does not capture the difference between the two people, which is accommodated in the *options* approach and comes closest to the notion of standard of living (Atkinson AB 1999).

Sen explained that *development* should be viewed as a process of expanding the real freedoms that people enjoy. To him, expansion of freedom is the (i) primary end and (ii) the principal means of development, which are referred to as the “*constitutive role*” and the “*instrumental role*” of freedom respectively. The *constitutive* role of freedom refers to the enrichment of human life through elementary capabilities. This includes ability to avoid starvation, premature mortality, being literate and numerate and the ability to enjoy political participation at the local and higher levels. These are not merely rights one should enjoy but rather an intrinsic importance of human freedom to evaluating the value of freedom. The *instrumental* role of freedom refers to different kinds of rights, opportunities and entitlements that contribute to the expansion of freedom in general (Flores-Crespo P 2001). It includes five distinct types of freedoms: (i) political freedom, (ii) economic facilities (iii) social opportunities (iv) transparency guarantees, and (iv) protective securities (Sen AK 2000; Atkinson AB 1999; Barkat A 2001). Elements of these different types of freedom are shown in Table 1.

Over the past few decades, Sen’s approach to understanding development has become quite popular among the development economists and social scientists. It is now well-recognized that income (or consumption or pure subjective pleasure) is not adequate in defining the well-being and thus a consideration of health and education is also needed. Sen’s analysis of well-being has subsequently led to the development of the Human Development Index of the UNDP. It is a simple average of three indices - the life expectancy index, educational attainment index

Table 1 : Elements of Sen s five types of freedom

Types of freedom	Elements
Political freedoms	Forums for free debate; ability to participate in public discussions; protection for dissenters; free media; existence of political parties; elected bodies; facilities to scrutinize authorities; positional arrangements to ensure checks and balances between judiciary, legislature and executive; decentralization; citizen's participation; institutional arrangements
Economic security	Open labour market; protection from bondage; access to product markets; saving opportunities; stable business ethics; title to land; freedom for women to seek employment outside home
Social opportunities	Good health; basic education; gender equity; women's well being; childcare; property rights for women
Transparency guarantees	Absence of corruption; mechanism for seeking justice; guarantees of disclosures, lucidity and speed of judicial decisions; access to police protection
Protective security	Emergency facilities; shelters; subsidy for victims of famine and disaster; arrangements for protection of extreme deprivation

Source: http://www.removingunfreedoms.org/five_freedoms.htm

and adjusted real GDP per capita index.⁸ However, despite having many technical criticisms of the index, there is no denying that the introduction of health and education has changed the course of *development* debate and brought it out of the narrow base of *utilitarian* paradigm. This has not only widened our horizon in viewing *development* but also led to an enhanced policy focus on these two variables, which is explicit in the Millennium Development Goals (MDGs) of the United Nations.

4. Insights from Applied Field: 1980s - onwards

While the *development* discourse in 1970s had been centered on the theoretical aspects of poverty, 1980s saw the concentration towards the application and consolidation of the theories, and related policy debates (Kanbur R 2003). Evolution of a number of important paradigms may be noticed – development through *empowerment*; *participatory development*; *gender based development*; *poverty dynamics*, *risks and vulnerability*, etc.

8. The index is derived by dividing the sum of these three indices by 3. $HDI = 1/3 * [life\ expectancy\ index + education\ index + GDP\ index]$, where each index is defined as: $Index = [Actual\ value - Minimum\ value] / [Maximum\ value - Minimum\ value]$. The HDI is ranked on a scale of 0 to 1, where low human development is ranked on scale 0.0 to 0.499, medium human development 0.50 to 0.799, and high human development 0.80 to 1.0.

4.1 Development through Empowerment

Development can also be explained in terms of people's empowerment. *Empowerment* is defined in many ways, but in simple terms it can be thought of as "*enhancing the possibilities for people to control their own lives*" (Rappaport 1981). World Bank's 2002 Empowerment Sourcebook identified it as "*the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives*". Thus empowerment may be conceptualized as ensuring access to resources and capacity to participate in decisions and affect outcomes of interest. It is a process by which people learn to think critically about their own circumstances and possibilities. Ensuring empowerment presupposes the removal of formal and informal institutional barriers⁹ that prevent people from taking action to improve their well-being and limit their choices. World Bank (2002) identifies four key elements of empowerment: (i) access to information, (ii) inclusion and participation, (iii) accountability, and (iv) local organizational capacity.

4.2 Participatory Development

While the concept of *empowerment* has raised some sort of sensation in the *development* discourse, another related model of *development* is what is known as "*participatory development*". People's participation as a concept was formulated in the 1970s, in the background that the different approaches to rural development, such as community development, integrated rural development or basic needs did not often lead to significant poverty reduction in the rural areas. As the World Conference on Agrarian Reform and Rural Development (WCARRD, Rome 1979) declared, "*If rural development is to realize its potential, disadvantaged rural people have to be organized and actively involved in designing policies and programmes and in controlling social and economic institutions*". After WCARRD, and throughout the 1980s and 90s, participation in rural development gradually became more established among governments, donors and international organizations. With regard to rural development, *participation* may be defined as, "*...people's involvement in decision-making processes, in implementing programmes, their sharing in the benefits of development programmes and their involvement in efforts to evaluate such programmes*" (Cohen and Uphof 1977, cited in UNESCAP 2009).

9. Key formal institutions include the state, markets, civil society and international agencies. Informal institutions include social norms and exploitative relationships (World Bank 2002).

One useful method used for ensuring development through participation is *Participatory Rural Appraisal (PRA)*.¹⁰ From 1980s and onwards the World Bank's poverty assessments focused on such "*qualitative*" components, that went beyond and complemented the standard distributional analysis from a representative household surveys, and included methods which are typical to anthropological and sociological research like participatory poverty analysis, unstructured interviews, discourse analysis, etc (Kanbur 2008).

4.3 Gender based Inequality and Development

The economic dimension of the gender based poverty and discrimination came at the forefront of the *development* discourse in the 1980s, with the introduction of a number of theoretical and conceptual works on intra-household resource allocation models and their application to the household data sets. As it is mentioned earlier, such debates had been introduced by Sen (1984), subsequently analyzed by others (Haddad L and R Kanbur 1990). However, there are real problems in tracing out the extent and nature of intra-household inequality in consumption. These are especially due to the lack of individual level data on household consumption, apportioning such consumption at individual level, etc (Kanbur R 2008).

Apart from the methodological problems related to measuring the level of inequality in the allocation of resources, other problems are associated with measuring and attributing the role of women in development, particularly due to the lack of reliable data, nature of invisibility of women's work, and their

10. Participation may involve different forms: Passive participation is a unilateral announcement by an administration or project management, without listening to people's responses, about what is going to happen. The information belongs only to external professional. Participation in information giving requires that people participate by answering questions posed by extractive researchers but they can not influence proceedings. Participation by consultation holds that people participate through consultation and external people listen to views. Participation by material incentives requires that people participate by providing resources, for example labor, for food, cash or other material incentives (examples include much on-farm research). Functional participation means people participate by forming groups to meet predetermined objectives related to the project, which can involve the development or promotion of externally initiated social organization. Interactive participation means people participate in joint analysis, which leads to action participation plans and the formation of new or strengthening of existing institutions. Self-Mobilisation refers to people's participation by taking their initiatives independent of external institutions to change systems. They develop contracts with external institution for resources and technical advice, but retain control over how resources are used (UNESCAP 2009). Key formal institutions include the state, markets, civil society and international agencies. Informal institutions include social norms and exploitative relationships (World Bank 2002).

unremunerated family income. A report prepared for the World Bank reads that “women provide a large proportion of the labour of agricultural production, even though official statistics based on census and survey instruments often underestimate women’s work and its contribution to national wealth. Problems persist in the collection of reliable and comprehensive data on rural women’s work in agriculture and other productive sectors because of (i) invisibility of women’s work, (ii) seasonal and part-time nature of women’s work, and (iii) unremunerated family (mostly women and children) labour” (World Bank 2008, cited in Action Aid 2010).

The issue of women’s access to land and other productive resources constitutes a major concern in the development policies. It is suggested that if a rural woman acquired a field of her own, it could be an immediate source of income and economic security in both direct and indirect ways¹¹ (Chopra K and C H Rao 2008). The World Bank estimated that if Sub-Saharan African women had equal access to the inputs from the agricultural sector (training, credit, equipment, fertilizers...), crops could increase by a percentage ranging from 6% to 20% (World Bank 2003, cited in Action Aid 2010).

4.4 Poverty Dynamics, Risk and Vulnerability

A new wave of theorizing poverty has been started in the 1990s which focuses poverty in a dynamic and risky setting – i.e., how the poverty of an individual is to be assessed who is in poverty in one period and out-of-poverty in the next (i.e., a phenomenon of “chronic” versus “transient” poverty). This encompasses also the analysis of “risk” and “vulnerability” – what is the risk faced by individuals and households at different levels of income or how this can be aggregated to provide an overall level of risk for the society (Kanbur 2008). As suggested in Wisner B (2006), the literature on *risks* and *vulnerability* assessments can be classified into four broad categories:

First, *Demographic approach* defines vulnerability in a crude and undifferentiated way over things, systems and people, and is thus inspired by an engineering approach. It considers human beings as one of many “*elements*” at risk like buildings, bridges, health care systems, strategic petroleum reserves, cyber information systems, etc.

11. Direct ways refers to the enhancement of production possibilities, such as growing crops, growing food for cattle, cultivating a vegetable garden, planting trees, etc. Indirect ways include access to credit from institutional and private sources, serving as mortgageable or saleable assets during crisis.

Second, Taxonomic approach, based on empirical observation, focuses on the vulnerability of social groups and is concerned with the causes of this social vulnerability. According to this approach, different groups of human beings suffer

Table 2 : Empirical Taxonomies of Vulnerability

Author	Taxonomies of Vulnerability: Groups/Classes/Components, etc
Morrow (1999): (Vulnerability inventory in the coastal Florida)	<ul style="list-style-type: none"> • The elderly (particularly frail elderly) • The physically or mentally disabled • Renters • Poor households • Women-headed households • Ethnic minorities (by language) • Recent residents/immigrants/migrants • Large households • Large concentrations of children/youth • The homeless • Tourists and transients
Aysian (1993)	<ul style="list-style-type: none"> • Material/economic vulnerability : lack of access to resources • Social vulnerability :disintegration of social patterns • Ecological vulnerability: degradation of the environment and the inability to protect it • Educational vulnerability: lack of access to information and knowledge • Attitudinal and motivational vulnerability: lack of public awareness • Cultural vulnerability: certain beliefs and customs • Physical vulnerability: weak buildings and weak individuals
Lavell (1994)	<ul style="list-style-type: none"> • Economic • Social • Educational and informational • Environmental
Cannon (2000):	<ul style="list-style-type: none"> • Initial well being - nutritional status, physical and mental health, morale • Livelihood resilience - asset pattern and capitals, income and exchange options, qualifications • Self-protection - the degree of protection afforded by capability and willingness to build safe home, use safe site • Societal protection - forms of hazard preparedness provided by society more generally, e.g. building codes, mitigation measures, shelters, and preparedness • Social capital - social cohesion, rivalries, number and strength of potentially conflicting or cooperating groups

Source: Wisner B, in G Bankoff et. al. (etd., 2006)

different degrees of death, injury, loss and disruption from the same event, and also experience different degrees of difficulty, success or failure in the process of recovery. A number of empirically developed taxonomies, as proposed in the vulnerability and risk assessment literature, are shown in Table 2.

Third, *Situational approach* highlights the nature of a person's daily life and his/her actual situation rather than answering what kind of groups a person belongs to. This approach recognizes three kind of contingency: (i) social vulnerability is not a permanent property of a person or group but changes in respect to a particular hazard. For example, *Muslim* women in Bangladesh are reluctant to climb trees on religious grounds, and so they are more vulnerable than men in a flash flood or storm surge; (ii) it concerns the constantly changing daily, seasonal and yearly circumstances of a person's situation. Examples include childbirth, or occupational disease or accident; and (iii) vulnerability is associated with the complex interaction of particular overlapping identities and forms of empowerment or marginality. For example, it was not simply women who mostly died in heatstroke in Shicago in 1995, but elderly women living on their own on limited incomes. They were afraid to come out to shelters, or their lack of mobility inhibited them. They could not afford air conditioning, and they kept their windows closed in fear of thieves.

Fourth, *Contextual and proactive approach* utilizes techniques to map and make inventories, seasonal calendars and disaster chronologies to understand vulnerability. In some parts of Latin America and Southern Africa, such community based vulnerability assessment has become quite common. Through different pilot projects, people in citizen-based groups have become capable of participating in environmental assessments, such as Geographic Information System (GIS). There are many examples of grassroots actions of poor, elderly, women and minority communities who have shown difference in post disaster decisions and outcomes [Wisner B, in G Bankoff et. al (etd.) 2006].

5. Poverty-Inequality-Development: Emerging Questions (2000 - onwards)

Kanbur R (2003, 2005) has systematically raised a number of questions regarding the issues on growth, inequality, and poverty. He has classified the whole sets of questions into two categories. (i) first level hard questions, and (ii) second level harder questions. The *first level hard questions* are related with identifying the "*policy variables*" that lead to equitable growth. It can be illustrated with an example – say, a policy maker believes that free-trade leads to growth because he finds that trade-ratio is positively associated with growth. But the real problem is

that trade-ratio itself is not a policy variable, it is rather an outcome variable. But when he takes true policy variable like “tariff”, he does not find any statistical association between these two. Many studies have suggested for reducing tariffs in international trade on the ground that there is a positive empirical link between trade-ratio and growth, but these lack sound methodological basis for such arguments. Thus establishing the causal links between “*policy variables*” (and not with *outcome* variables) and “*growth*” and “*equity*” remains a critical question in the poverty discourse. Another important question is related with empirically establishing the causal links between initial inequalities to subsequent growth - i.e., “*does higher inequality at a point in time leads to slow growth in the subsequent periods? ...Which sort of “institutions” would lead to success in poverty reduction?.....What about the political economy of building and maintain institutions, and selecting and implementing policies?*” (Kanbur R 2003, 2005). So, these are the critical “*first level hard questions*” yet to be resolved.

Among the *second level harder questions*, the **first** is that “*if the total number of poor has gone up but the percentage of the poor in the total population has gone down due to population growth, whether the poverty has gone up or down?*” – This remains an empirical problem given the fact that the World Bank’s estimate of world poverty from 1990-1999 shows an increase in the absolute number of people below poverty line (earning less than \$ 2 a day) from 2.7 billion to 2.8 billion and a corresponding decrease in the percentage from 62% to 56%. Thus weighting the “*numbers*” vis-à-vis the “*percentage*” of poor poses a problem (Kanbur R 2005).

The **second** is related to the phenomenon of “*poverty versus death*”- i.e., “*if the incidence of poverty goes down as a result that the poor dies at a faster rate than the non-poor, is this a legitimate decrease in poverty?*” (Kanbur R 2003, 2005). Thus if it happens that the poor in Africa, due to lack of access to preventive measures of AIDs dies at a disproportionately higher rate than the non-poor and so are missing from the list of poor people, then would the typical poverty measures reflect the real severity of poverty? So, while assessing the poverty at present, is it necessary to keep track of the information that a poor person has died due to poverty (or not) in the past?

The **third** question is related to “*what outcomes other than income should be included in the assessment of success, and how they should be weighted relative to income and relative to one another while reducing poverty*” (Kanbur R 2003, 2005). For example, how much weights should be given to the different goals in the MDGs while allocating public resources. In other words, how much public

resources should be allocated to reducing income poverty, primary education, gender equality, child mortality, maternal health and so on.

The **fourth** vital question is related to the aggregated national measures of poverty - “suppose poverty goes down, but this is composed of a fall in poverty for some but an increase in poverty for others – is such aggregation across poor individuals ethically permissible? One of the dirty secrets of policy reform is that it not only pits rich against poor, but also some poor against other poor” (Kanbur R 2003, 2005). Thus how to deal with the issues of aggregate poverty measures versus regional dimensions (within a sovereign state) and the impacts of policy reform that places poor vs poor and one socio-economic group to another poses some ethical questions in resolving the poverty dilemma.

6. Conclusion

On the basis of the discussions presented in the paper, the whole discourse of poverty, inequality, and development during last four decades can be summarized in three stages:

First, Development Paradigm prior 1970s: The *development* philosophy was predominantly based on the idea of a *Pareto optimal state* and the neo-classical philosophy of maximization of *society’s utility function*. Emergence of *development economics* as a new paradigm in 1940s led to subsequent shift in the focus of analysis towards attaining higher growth rate, but not breaching the fundamental basis of the neo-classical *development* paradigm. A number of growth models were forwarded where mobilization of savings or lowering the capital-output ratio was the prime concern.

Second, Debate over Inequality and Multidimensionality (1970s – 2000): The question of inequality came at the centre point of the debate. It was felt necessary to view poverty in a broader context. Advancements took place both at the theoretical and practical levels. Up to mid-1980s, the debate was centered more on to the theoretical grounds rather than practical and applied aspects. Such advancements at the theoretical level had been pioneered mainly by Nozick, Rawls, Sen, and Stiglitz. A number of inequality measures had been developed. Since mid 1980s -2000, the concern was to apply the theory into practice. Capturing multidimensionality became the common slogan. A number of development paradigms were implemented and evaluated – *empowerment, participatory development, gender based development, poverty dynamics and risks*, etc.

Third, *New Debates (2000 – onwards)*: New questions have been raised, which should be resolved both at the conceptual and at the policy level. Major concerns are related to:

- (i) Which policy variables would lead to equitable growth? Which sort of institution would generate success? What is the political economy of Development?
- (ii) How would the poverty indices and measures be corrected to incorporate the poverty severity due to premature deaths among poor than non-poor?
- (iii) “Numbers” or “percentage” of poor matters? – Which would best indicate the poverty trend and thus guide the policy makers specially when there is a contradiction between these two?
- (iv) Does the simple aggregation of the national poverty suffice? How to capture and address the regional dimension of poverty?
- (iv) How would the different component goals of poverty-reduction be weighted? How to apportion the allocation of resources among different components while poverty reduction policies are deigned and implemented?

Therefore, resolving these questions and addressing these issues would dictate the future direction of development-discourse.

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