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Chapter 5

Poverty, Education and Inter-Generational Mobility in India: A Review of the Literature

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Abstract:
The purpose of this paper is to review the existing literature on the role of education in poverty alleviation, the poor's access to education, and inter-generational poverty alleviation through education. Poverty alleviation is an important issue in developing countries, including India. The concept of poverty has been extended far beyond income poverty. Poverty is, nevertheless, still largely understood in monetary terms in the existing empirical examinations of the relationship between education and poverty. In the existing literature, it is largely found that the role of education in poverty alleviation should be understood in a specific context and time. At the same time, the quality and quantity of education a child can receive are also likely to affect a wide range of opportunities in the course of their life, and, worse still, such disparities reinforce the socio-economic status quo for future generations. When it comes to educating children, poverty associated with other disadvantages, such as caste, religion, gender and so on, as well as the schools in the community and surrounding communities, affects poor children's schooling and retention. A hierarchical division of school, reflecting the socio-economic status of the family has intensifies over the years in India. In this regard, children in poor households may have difficulties in getting out of poverty.

Key words: education, poverty, inter-generational mobility, India

1. Introduction

Poverty alleviation is hardly a new theme in strategies for development and the existing literature on development. It has, nevertheless, re-emerged to dominate the international development agendas of international organizations and northern governments since the 1990s (Lipton and Maxwell, 1992). One Millennium Development Goal, endorsed by world leaders at the United Nations Millennium Summit in 2000, was to reduce by half,

between 1990 and 2015, the proportion of people with incomes less than one dollar a day and those suffering from hunger. In India, 41.6% of the population fell below the poverty line, living on less than 1.25 US dollars a day in 2004-05 (World Bank, 2011). It has been pointed out that poverty reduction has slowed down in recent years (Dhamija and Bhide, 2010; Deaton, 2003; Sundram and Tendulkar, 2003a; Sen and Himanshu, 2004a; 2004b). As accelerated economic growth has benefited people disproportionately, poverty alleviation is still a very important issue in India.

Education is regarded as a means of escaping from poverty (Becker, 1993). Education, primary education in particular, is increasingly perceived as playing a pivotal role in poverty alleviation (Jimenez, 1995; Lipton and Ravallion, 1995). Human capital theory, more specifically the rates of return on education, is used as the theoretical foundation for emphasizing the importance of primary and girls' schooling in developing countries. This theory assumes that education can both enhance an individual's productivity - and thus improve their earnings - and contribute to the economic growth of the country as a whole (Shultz, 1963; Becker, 1993). The higher priority given to women's education in developing countries is based on empirical studies showing that the rates of return on female education are often higher than for male education (Psacharopoulos, 1994; Psacharopoulos and Patrinos, 2002)[1]. Moreover, educating women supposedly leads to lowering the birth rate and improving the education, nutrition and health of children, and can possibly break the vicious circle of poverty (Colclough, 1993; Lewin, 1993; Lipton and Ravallion, 1995; Watkins, 2000; World Bank, 1995).

At the same time, access to better quality education for children in poor households is relatively more limited than for those in non-poor households. Moreover, much education research shows that deprivation in terms of education is caused not merely by poverty but also by related factors such as international, national, community, school, household and individual factors (Rose and Dyer, 2008). In India, it is generally the case that poverty, which is associated with other disadvantages, such as gender, caste, religion, and location, limits educational opportunities. Evidence suggests a high association between parents' and children's levels of education in developing countries (for example, Strauss and Thomas, 1995) implies that getting out of poverty through

[1] In recent years, the higher priority given to women's education has also been based on a basic human rights approach, for instance, universal primary education by 2015, a Millennium Development Goal. Focusing on primary education can be interpreted as an interest in the common features of the right-based and human-capital-based approaches.

education is not easy for poorer households where parental educational level tends to be lower than that of non-poor households, particularly in a situation where the overall level of education is slowly improving in developing countries.

The purpose of this paper is to review the existing literature on the role of education in poverty alleviation, the poor's access to education, and inter-generational poverty alleviation through education. The structure of the paper is as follows. The second section will discuss the concepts and definitions of multi-faceted poverty. The third section will focus on education-poverty linkages, including human capital theory. The fourth section will outline various issues regarding poor people's access to education. The fifth section will summarize the main findings and conclude.

2. Conceptualization of Poverty

2.1. Income/Expenditure Poverty

In this approach, the cut-off poverty line is based on income or expenditure, and those who fall below the poverty line are regarded as being poor. The poverty line serves as the threshold of deprivation, and the "poor" are often considered as a target group in poverty alleviation policies.

In India, the poverty line has been constructed on the basis of what Ravallion (1998) terms the food-energy intake method[2], i.e. per capita monthly consumption expenditure. This amounted to 49.09 and 56.64 rupees at 1973/74 prices in the rural and urban areas respectively, as obtained by National Sample Surveys, and was equivalent to a basket of food and non-food items that meet a calorific intake per capita per day of 2,100 kcal and 2,400 kcal in the rural and urban areas respectively. This is adjusted for price changes using specified consumer price indices in the rural and urban areas in each state.

There have been several types of criticism leveled at the methodology of this estimation of poverty. These refer to outdated consumption patterns in goods and services, the methodology of price adjustment, and so forth (for example, Deaton, 2006). In 2011, the government accepted the recommendation of an expert committee, which revised the

[2] Ravallion (1998) illustrated two widely used poverty line construction methods: the food-energy intake method and the cost-of-basic-needs method. In the former method, the poverty line is constructed by calculating the monetary value of pre-determined food energy requirements. In the latter method, the poverty line is based on a bundle of basic consumption needs that need to be met in order to attain a widely accepted minimum standard of living.

method for estimating the expenditure of the poor, particularly in rural areas by renewing the poverty line basket and price indices. According to the new estimates (Government of India 2009), the proportion of the population below the poverty line (head count ratio of poverty) in 2004-05 turned out to be 41.8% in rural areas, which is significantly higher than the estimation by the previous method (28.3%).

A slight modification of the basket and price adjustment led to a different identification of the poor. This implies that the monetary poor, like other concepts of poverty, cannot be free from numerous arbitrary and subjective judgments in conceptualization and measurement, including political considerations, although these judgments are often invisible and far from transparent.

2.2. Multi-faceted Poverty

2.2.1. Non-monetary poverty

The approach to poverty is dominated by monetary poverty, probably because it is methodologically developed and advanced. However, it is increasingly recognized that monetary poverty reflects just one aspect of the multifaceted nature of deprivation. The current understanding of poverty extends far beyond the conventional approach based on the deprivation of income/expenditure (for example, Sen 1981; 1985; Haq, 1995; Stewart *et al*. 2007; World Bank, 2001).

The concept of a Basic Needs Approach, among one of the non-income approaches, emerged in the late 1960s, and was later adopted in development aid strategies for developing countries by international organizations such as the International Labour Organization and the World Bank in the mid-1970s. The characteristics of this approach encompass non-material needs, which include self-determination, self-reliance, political freedom, security, participation in decision-making and identity (Streeten, 1979). In practice, however, this approach was translated to provide specific target groups with specific priority needs, such as for basic services and infrastructure, including education, health, nutrition, safety, water and sanitation, shelter, waste management, roads, and light. The poor in this approach are largely passive in the sense that these “basic needs” are often not defined by the poor themselves.

The concept of poverty is explored from perspectives of anthropological methodology, which offer some insights into the conceptualization of poverty. It is increasingly recognized that the self-perception of poverty by the poor themselves is different in

terms of nature, size, insight, causes, and so on from poverty line approaches, through participatory observation (Jodha, 1988; Chambers, 1997, Narayan et al, 2000a; 2000b, Narayan and Petesch, 2002). Chambers (1997) argued that poverty, in general, tends to be understood in a "universal, reductionist, standard, static controlled way, while many poor people's realities are local, complex, diverse, dynamic and unpredictable" (Chambers, 1997, pp. 162-163). Jodha (1988), based on longitudinal village surveys in Rajasthan, India, points out that what villagers chose as their own criteria for poverty were different from per capita income, and, interestingly, those who were worse off in terms of income were actually better off in terms of their own criteria. The generalization of poverty in this approach is limited; however, it can enhance our understanding of poverty in a locally-dynamic and context-specific way.

Amartya Sen laid greater emphasis on "understanding poverty and deprivation in terms of the lives people can actually lead and the freedoms they do actually have" (Sen, 1999 p. 92). The capability approach he pioneered underlines the importance of what people are able to be and do. This approach does not completely deny income poverty, since income is often required as a means to achieve capability. However, the concept of capability only partially overlaps with income poverty, if indeed it does at all. Sen himself did not list what he meant by capability. However, those who specify a set of capabilities tend to identify similar items to those in the basic needs approach, when it comes to operating the concept of capability (Saith, 2007).

2.2.2. Subjective Well-being

The poverty described above contains more or less arbitrary and subjective judgments by the outsider. In contrast, subjective well-being or happiness, both of which are largely used interchangeably in the existing literature, has been assessed by own including the poor, dealt with mainly in psychological research. In psychology, subjective well-being contains "a broad category of phenomena that includes people's cognitive and affective evaluation of the events that occur in their lives, and the evaluation of life satisfaction and satisfaction with important domains" (Diener *et al.*, 1999, p. 277).

Subjective well-being is a relatively new and emerging area of research in the social sciences, particularly in developing countries. In social sciences, self-reporting life satisfaction or happiness, a single component in this broad category of psychology, is often analyzed, mainly due to data availability.

It has been reported that there is a weak association between national wealth and subjective well-being. Bjornskov *et al.* (2008) found in their empirical analysis on cross-country data that variables which had significantly affected satisfaction in the existing literature, such as national income, welfare state characteristics, unemployment rates and higher education do not determine satisfaction. This indicates that satisfaction or happiness in developing countries is not necessarily low. Diener and Selgman (2004) argued that economic indicators play important roles in the early stage of economic development, where basic needs still have to be met. However, as society becomes wealthier, factors related to social relationships or enjoyment at work rather than monetary wealth tend to be important.

Income in developing countries has an effect on subjective well-being, but it is only one determinant among many. Kingdon and Knight (2006) assessed income and subjective satisfaction with life in South African households. They found that income positively correlates with subjective well-being, but it is not exclusively associated with it. The result is consistent with findings in Bangladesh where factors other than income contribute to subjective well-being (Camfield *et al.*, 2009).

It has been pointed out, mainly from the literature in developed countries, that relative incomes play an important role in subjective well-being (for example, Van Praag and Ferre-i-Carbonell, 2004). More specifically, relative deprivation has a negative effect (for example, Frey and Stutzer, 2002). This negative effect of relative deprivation is also found in developing countries (Graham and Felton, 2006 for Latin American countries). At the same time, the evidence in the existing literature on the relationship between relative income and subjective well-being among poor households in developing countries is inconclusive. On the one hand, relative income has not emerged as an important determinant of subjective well-being among the poor, but it is among the non-poor (Kingdon and Knight, 2007; Ravallion and Lokshin, 2010). On the other hand, Fafchamps and Shilpi (2008) found relative assessment has a negative effect on subjective well-being in terms of consumption and basic services, even among poor households where a market-oriented lifestyle is not entirely present.

2.3. Summary

Poverty studies, including some using the concepts listed above, have increasingly advanced in their acknowledgement of the multi-dimensional nature of deprivation,.

Laderchi *et al*. (2003) compared and contrasted different definitions of poverty and found that they are very distinct from each other. This raises a serious concern that poverty alleviation policy and programs lead to a targeting of specific people and exclude others. For this reason, in recent years, a mixed methodology using, for example, both qualitative and quantitative approaches, is recommended when analyzing poverty (Davis and Baluch, 2011; Hulme and Toye, 2006; Kanbur and Shaffer, 2007; Pradhan and Ravallion, 2000).

A lack of education is increasingly regarded as part of poverty or deprivation. For example, a lack of education is often one form of deprivation in the basic needs approach, the participatory approach and the capability approach. UNESCO (2010) defined those who have below four years of education as educationally poor, since at least four years of education are required to acquire basic literacy and numeracy skills, and those who have fewer than two years of education are considered extremely education poor. Poverty is, nevertheless, still largely understood in monetary terms in existing empirical examinations of the relationship between education and poverty (Hulme and McKay, 2005).

3. Getting Out of Poverty through Education

The voluminous literature on the nexus of education and poverty can be classified into two arguments, based on the direction of their causality. One argument is that education positively influences poverty alleviation and tends to be simpler and more straightforwardly presented than is the case in the poverty-education literature. The other argument is that poverty, or low incomes, adversely affects the quality and quantity of education at the macro, country, level (UN Millennium Project, 2005), the meso, regional and school levels (Michaelowa, 2001; Watkins, 2000) and the micro, household, level (Harper et al. 2003; Watkins, 2000). The first argument, dominated by economists, demonstrates how education can contribute to income poverty alleviation, and is partly reflected in the methods economists adopt to show how education-related-input variables can transform poverty-related-output variables. The second debate, dominated by educationalists, suggests that the poverty and education nexus is complex. This is partly attributable to the difficulty in distinguishing the effects of poverty on education from the effects of education on poverty. Moreover, much education research shows that deprivation in terms of education is caused not merely by poverty but also by related factors such as international, national, community, school,

household and individual factors (Rose and Dyer, 2008). Nevertheless, both poverty as a reason for lack of access to education and education as a means of poverty alleviation causalities are opposite sides of the same coin.

It has been pointed out that the poor, are more likely to be illiterate, therefore education seems to play a role in upward mobility. It is also the case in India, however, if the poor are initially moderately poor (Bhide and Mehta, 2004). Furthermore, in rural areas, education provision for farm household heads increased their income much less than that of non-farm educated household heads (Gaiha and Deolalikar, 1993). These studies imply that education can reduce income poverty in specific circumstances to a certain degree. Some studies argue that transient poverty is widespread in rural India, i.e. some households move around the poverty line (Gaiha and Imai, 2003; Jayaraman and Lanjouw, 1999 for review; Walker and Ryan, 1990). Gaiha and Imai (2003) found that there is little difference in the probability of sliding into poverty between household heads with more than five years of education and those who have been educated for less than five years. Unfortunately, it is still not clear from these studies what level or type of education is likely to play a role in helping people to escape from income poverty (or to avoid sliding into income poverty) and non-monerary poverty. Quantitative data can identify poor (households) and their characteristics, but cannot clearly explain why some remain poor, others move out of poverty, and, in such cases, what role education plays.

Since poverty has a significant impact on an individual's deprivation throughout life, it can be transmitted to the next generation. Education, as a means of poverty alleviation, might have a lot of potential in breaking the vicious cycle of intergenerational poverty. Evidence suggests that parental education plays an important role in children's education (for example, Strauss and Thomas, 1995). While the evidence on the effect of parental education, particularly mother's education, on children is not supported by some empirical studies in developed countries (Behrman and Rosenzweig, 2002; Black et al., 2005; Plug, 2004), the evidence from developing countries shows that parental, particularly mother's education, affects children's education (Behrman *et al*., 1999; Kabeer and Mahmud, 2009). A high association between parent and child levels of education in developing countries implies that getting out of poverty through education is not easy for poorer households, particularly when the overall level of education is slowly improving. It is, therefore, important to understand how education is presumed to help reduce poverty.

Although education might have a direct or indirect effect on health, fertility, and citizenship, among other things, this section is confined to a discussion on income effects, with a particular focus on human capital theory.

3.1. Human Capital Theory

Human capital theory is generally traced back to William Petty in the seventeenth century. Petty was followed by Adam Smith's classical work "*Inquiry into the Nature of Causes of the Wealth of Nations*" in the eighteenth century and denotes a worker's skill as the fundamental source of economic progress and welfare (Rosen, 1998). However, this theory did not have an impact on mainstream economics of education until the 1960s and the work of two Nobel Prize winners, Theodore Schultz and Gary Becker. The first's view of education as human capital considered the relationship between education and economic growth as well as education and individual earnings (Shultz, 1963). The second developed the theoretical framework by including rates of return on investment in education (Becker, 1993). Since the 1980s, endogenous economic growth theory has shed light on human capital in the process of technological change. Rapid economic growth in the East Asian economies is also perceived to be attributable to human capital having been accumulated by the beginning of that economic growth (World Bank, 1993).

At the macro level, the investment in education in a country as a whole will contribute to economic growth (Barro, 1991; Romer, 1990; Petrakis and Stamakis, 2002). Some academics illustrate the positive effects of education expenditure on economic growth (Poot, 2000; Skylwester, 2000), and McMahon (1999) shows previous estimates of monetary and non-monetary returns on education to have been underestimated. Pritchett (2001), on the other hand, argues that there is no association between rising educational attainment in the labour force and the rate of growth of output per worker. He proposes alternative reasons: firstly, a negative institutional and governance environment lowers economic growth despite the accumulation of education; secondly, the marginal returns on education fall rapidly as the supply of an educated labor force expands while demand remains stagnant; and thirdly, low quality education does not create any human capital. This suggests that human capital needs to be understood in a broader context, including its social, economic and institutional circumstances, the labor market, and the quality of education.

At the micro level, human capital theory says that the educated receive higher lifetime earnings than the less- or un-educated, since the theory assumes that education increases worker productivity. For example, education makes a difference to farm productivity (Lockheed et al., 1980a; 1980b). As physical capital can be analyzed in terms of costs and benefits, human capital and education, in particular, are similarly calculated as private (individual) and social (society as a whole) rates of return on investment, most often by using an earnings function regression methodology named after Mincer (Mincer, 1974). This is generally based on years of schooling, years of labor market experience, and earnings.

3.2. Findings on the Rate of Return on Education

The existing research on rates of return on education can be summarized as follows (Psacharopoulos, 1994; Psacharopoulos and Patrinos, 2002): 1) the rates of return on education fall with the level of economic development, i.e. developing countries are more likely to record higher rates of return due to a scarcity of more highly educated workers; 2) private returns are higher than social returns; 3) in general, women in the labour market show a higher rate of return than men; 4) the private rates of return on primary education are higher than on secondary and tertiary education; and 5) the rate of return on general education tends to be higher than on vocational education.

Colclough *et al.* (2010) reviewed the empirical evidence of a pattern of return on education, suggesting that the rate of return on primary education in recent years may not be lower than that on the post-primary level of education. In fact, these conventional patterns of returns on education are not evident in previous studies in India. For example, the private rate of return on primary education is lower than that on secondary education (Banerjee and Knight, 1985; Kijima, 2006; Kingdon, 1998; Santhapparaj, 1996; Tilak, 2007; Unni, 1995). Rates of return on primary education are sometimes even negative (Kingdon, 1998; Santhapparaj, 1996), and rates of return for females are lower than for males (Duraisamy, 1988; Kingdon; 1996; Malathy, 1989). Furthermore, research shows that the lower levels of schooling do not raise wages (Kingdon and Unni, 2001), while secondary and technical diploma/certificate education are more financially rewarding only in terms of waged employment (Duraisamy, 2002).

These studies imply that the rate of return on additional years of schooling may level off for many years and only perhaps increase for higher education compared to the general rates of return on schooling in the conventional pattern above. This shows that there are

low gains from the early years of schooling and larger gains from subsequent education at higher levels. The studies in India have also shown that the aggregation of cross-country studies needs to be closely examined in each country, and now even conventional studies (for example, Psacharopoulos 1994) are assumed to have methodological problems (Bennell, 1996), which might be why the previous studies in India contradicted conventional patterns.

The well-known original research of Lockheed et al (1980a; 1980b) is often cited as showing robust linkages between human capital and agricultural productivity, where they say that four years of education make a difference to farm productivity *in a modern environment* (King et al., 2005, emphasis by author). This enabling environment in terms of cultural, economic, political, social, etc. conditions is necessary for enabling human capital theory to work. Elsewhere, Appleton (2000) shows that the estimated effect of education on agricultural productivity is often large but generally statistically insignificant in Africa and some other developing countries. In India, Rosenzweig (1995) empirically examined rates of return on primary schooling in different regions of India during the Green Revolution, pointing out that returns on education increased in the regions where new high yield variety (HYV) seeds were used, while they did not change in the agricultural areas where the new HYV seeds were unsuitable. Dutta (2006) argued that the evidence that the returns on education are significantly higher and increase over time for regular wage workers in comparison to casual wage workers, and the widening of the wage gap between tertiary and primary education, can be attributed to the economic reforms during the 1990s. It seems that it is necessary for there to be economic opportunities that give educated workers the opportunity to take advantage of their education and skills. Therefore, it is indeed difficult to generalize the rates of return on education in developing countries using only a limited number of variables and without considering the broader context. Unfortunately, research largely neglects to take account of education (or formal schooling in a narrow sense) in society as whole and changing economic circumstances when applying human capital theory to policy-making in developing countries.

3.3. Critiques and Shortcomings of Human Capital Theory

Human capital theory is not uncontroversial. There is the danger of adopting the human capital approach without acknowledging its weaknesses and limitations. A number of problems, deficiencies and inadequacies have been pointed out both by economists and educationalists.

First, there are methodological problems in calculating the rates of return on education, such as age, relevance and the quality of the data, sample bias and unconsidered variables - the omission of family background, the quality of schooling, etc. (for example, Bennell, 1996; Lauglo, 1996; Samoff, 1996). In response to various criticisms of the human capital approach, refining the model by considering more socio-economic input and output variables as well as better quality data collection are commonly recognized as major ongoing challenges in the economics of education research.

Second, there is the question of assumptions (Fine and Rose, 2001). The labour market in developing countries is imperfect because it often discriminates against the poor and women. Other assumptions that might be difficult to prove are the linkages between education and productivity as well as between output and earnings. Human capital theory assumes that educated or trained personnel increase productivity and therefore earnings. However, productivity has rarely been examined, except for studies of agricultural workers, and earnings are, in practice, often used as a proxy for productivity and sometimes for occupations as well.

Third, screening theory shows that education yields useful information for identifying individuals with higher productivity. Here, education serves as a signal for employers (Spence, 1973). This theory highlights the asymmetry between information from employers and employees. The strong version of screening theory hypothesizes an identification of highly productive individuals throughout their entire working life. Human capital theorists claim that the educated in general earn more than the uneducated throughout their entire careers (Psacharopoulos, 1979). Dore (1976), however, argues that earning structures are often embedded in institutional settings, irrespective of productivity. A weak version of screening theory that assumes employers use educational qualifications as a proxy for other characteristics has not been rejected. Educational outcomes in the labour market might not be as straightforward as human capital theory suggests.

Fourth, there is the issue of context. Some of the tracer studies concerned with the linkages between education, employment and income from Africa suggest that education *per se* might not always be an advantage for gaining waged employment, though education generally increases the earnings of those employed (Al-Samarrai and Bennel, 2003; Bennel et al. 2006; Wagner et al., 1989). Dore (1976) identified ten

mechanisms for links between education and earnings, in which education is not always necessary. This implies that education and labour market outcomes are not simply associated, and education has to be located within an institutional and broader context, including the labour market. Shavit et al. (1998) argue that the rate of return calculation depends upon a number of contextual factors, such as the institutional structure of the national education system, and that many of these factors cannot easily be incorporated into empirical studies. Bowles and Gintis (1995, p.52) are seriously concerned that "conventional neoclassical human capital theory represents the transformation of inputs into outputs as a process governed not by social relationships but by the laws of physics and chemistry". Fine and Rose (2001) point out that the economic and social relations surrounding schooling cannot be caught, even by refining models by adding more input and output variables, as each variable is connected to another and they are mutually determinant variables. After all, education is not isolated from society, and it needs to be understood as part of overall society.

Lastly, not only the years of schooling, but also the quality of education matters in terms of learning and labour market outcomes. If just sending children to school generates human capital, how it is generated is highly questionable. In fact, even some rates of return studies show that returns on education in general are lower when school quality is taken into consideration (Behrman and Birdsall, 1983). Furthermore, human capital theory implicitly assumes that income/expenditure poverty alleviation by means of acquiring education leads to social inclusion. This is often regarded as one of the dimensions of poverty beyond income/expenditure-based definitions. As will be discussed in Section 4, schooling can play a strong role in reinforcing existing hierarchical and socio-economic relations, i.e. schooling structurally perpetuates the exclusion of certain groups in society. Schooling can have different meanings in different places at different times. Even one year of education has a different meaning in a different context (Breton, 2004). Thus, schooling which is socially, economically and historically constructed, should be understood as highly context specific (Fine and Rose, 2001).

3.4. Human Capital Theory beyond Regular Wage Earners

Human capital theory mainly examines waged labourers in developing countries, due to data availability. However, waged labourers in the formal sector generally account for a small proportion of the total labour force in developing countries. Only a few attempts have been made to examine the rates of return on education for informal sector workers

in developing countries, and these have achieved mixed results. Hence, the applicability of human capital theory to informal sector workers is still inconclusive (Lewin, 1993). For example, some studies have found that there is a positive correlation between education and income even in the informal sector in Honduras, Guatemala and El Salvador, and that rates of return on female education in the informal sector are higher than for males in Thailand (Watkins, 2000). Tueros (1995), on the other hand, summarises several findings in the informal sector in developing countries showing that human capital accounts for lower informal sector worker earnings and the impact of training on informal activities remains minimal. Taubman and Wacheter (1986) argue from the perspective of segmented labor market theory that human capital is largely irrelevant or less relevant to individual wages in the secondary sector, which offers low payment with few benefits, training or promotional opportunities, has poor working conditions and is a sector where workers frequently quit their jobs or are discharged.

Apart from the dichotomy of the informal/formal sectors in the labor market, there is a lack of research into differences in employment status other than those for regular waged workers. Glewwe (2002) suggests that future research should not only exclude government workers, whose wages are less likely to reflect differences in productivity and market prices than those of private sector workers, but should also include the self-employed, as the majority of workers in developing countries are not formal sector wage earners. In India, self-employed and casual labourers make up a significant proportion of the labour force. There is a need to examine the relationship between education and poverty among self-employed and casual workers.

Furthermore, women and men seem to differ in terms of education and labor market outcomes. For example, women's education tends to have a U-shaped relationship to waged work participation in India, since women are sometimes educated or trained for better marriages rather than for better employment opportunities (Harriss-White, 2003). Conventional calculations often mainly consider regular, highly educated waged women workers. However, the less educated are more likely to work in typically easily available activities in the informal sector without any better alternatives. This is attributable to their limited mobility due to their household responsibilities, including child rearing and sometimes cultural norms about commuting alone over long distances. Gender differences between the lower socio-economic segment of labourers need to be investigated.

Human capital theory focuses on education and labour market outcomes, which can be one of the main routes to income poverty alleviation. This linkage, however, needs to be understood in the Indian context. In India, since the 1980s, economic growth has accelerated, while the growth in employment has been sluggish and the share of regular wage workers has declined. A large majority of the workforce is engaged in the informal sector, which possibly further heightened the tension between education and labor market outcomes. Educational opportunities and access to decent employment are still relatively limited for the poor. Worse still, informal sector workers or the working poor are less likely to have access to vocational training than formal sector workers (Tuenos, 1995). Locating education and poverty within an economic and social context will suggest how far human capital, according to the segmented market theory that human capital is largely irrelevant or less relevant to individual wages in the informal sector, can be applied to the poor, and will highlight the problems in poor people's access to education.

4. Poor People's Access to Education

The role of education in monetary poverty was discussed in the previous section. To break the cycle of poverty, how then can the poor have access to schools?

Before reviewing the literature on the linkages of poverty to education, it is noted that schooling, paradoxically, can also play a strong role in reinforcing existing hierarchical and socio-economic relations, i.e. schooling structurally perpetuates the exclusion of certain groups in society. Freire (1970) argued that schooling can be regarded as maintaining social control. It is also pointed out that schooling can serve to educate children to become workers who accept inequality and vertical power relations, and who enter the labor market smoothly, rather than promote equal opportunities and personal development (Bowles and Gintis, 1976). The status quo of gender relations could be reinforced by school settings through textbooks, the curriculum, classrooms and teachers (Stromquist, 1998). In India, discrimination against lower castes is ingrained in the consciousness of teachers and students, reflecting pedagogical exchanges in schools (Bhargava, 2003). Nevertheless, it is still important for the poor to be educated as, besides its intrinsic value, education has instrumental value, too, in that it enhances the quality of life, it also helps people to earn more, improves their health, and raises a person's awareness of their rights for themselves and the next generations.

Evidence suggests that poorer people are more likely to be excluded from schooling (for

example, UNESCO 2005). The theory predicts that school enrolment increases when the net benefits of education outweigh its costs. It is suggested that poverty or low incomes adversely affect the quantity and quality of education one can receive (Drèze and Kingdon, 2001; Govinda 2011). The direct and opportunity costs of education disproportionately burden children in lower-income households (Tilak, 2009). According to the UNICEF survey of urban areas in seven Indian states, the monthly household expenditure on primary education per child as a proportion of per capita monthly consumption expenditure is remarkably high, ranging between 11 to 21 percent (Mehrotra, 2006). It is widely acknowledged that education is not free, even at government schools. Even if the tuition fee is free or negligible, and other incentives to come to school, such as free uniforms and text books, are given to students, other expenditures, including stationery, notebooks, travel, lodging, and meals, are borne by the students' households.

In India's case, access to education is closely related not only to the monetary poor but also to other forms of disadvantage stemming from gender, caste, religion, ethnicity, and region, among other characteristics that limit educational opportunities (Govinda, 2011; Jha and Jingran, 2005; Kingdon, 2007; Rustagi, 2009). The effects of disadvantages in terms of caste and religion are negligible in the broader context of whether, for instance, wealth, land distribution or the caste composition of the place where they live are more favorable to the poor (Borooah and Iyer, 2005; Husain, 2005). It is noted that education policies or programs generally aim to include children from these cross-cutting disadvantages, while monetary poverty in terms of access to education is often not clearly addressed.

Children from poor households may be withdrawn from schooling at the time of shocks, such as a natural calamity, or when funds need to be used on medical expenditure for household members who have taken ill. Evidence suggests that children's schooling is negatively affected by a temporary reduction in household income in rural India (Jacoby and Skoufias, 1997). Maintaining household income levels may lead to negative outcomes for children's schooling, because they receive less care, or because older children, particularly the girls, take on more responsibility for domestic chores and caretaking. Drop-out children often remain out of school (PROBE, 1999), which jeopardizes the chances of such children moving out of poverty.

Poverty and child labor are mutually reinforcing. Children in poor households are more

likely to be sent to work than those in non-poor households. Child labor tends to reduce children's education levels, hence the poverty cycle continues into the next generations. There are two contradictory views on the causality of child labor and education. On the one hand, the conventional argument is that children cannot go to school because of their work. On the other hand, it is argued that children drop out and then work (PROBE, 1999; Banerji, 2000). Whichever is the true direction of causality, working during childhood has a longer term negative effect, a higher probability of leading to future poverty (Harper, et al., 2003). Hence, the question arises as to whether children in poor households should have access to school only when households can sustain a minimum standard of living, and if this is the case how it can be achieved.

Schooling and environmental factors can also limit children's educational opportunities. The lower quality of education, including physical infrastructure and teaching quality, partly due to financial and human constraints in the expansion of school facilities in developing countries, may discourage children from attending school. Even if schooling is continued, children in developing countries learn much less in school than they should according to their curriculum (Glewwe and Kremer, 2006, for review). A hierarchical division of schools, reflecting the socio-economic status of the family, has intensified over the years in India. Therefore the kind of school, often government schools or private schools that even children in poor households can afford to study in, is presumably unrecognized by the government, since it charges lower fees but does not meet quality standards in terms of facilities and teachers. It is often the case in India that government schools suffer from neglect because their students come from lower socio-economic strata and the schools themselves are provided with fewer resources in comparison with private schools

There have been various policy initiatives in education to increase participation, including for those who are out of school. The law encourages community involvement in and monitoring of local schools[3]. This is supported by the literature that empowering the community to participate in the school through decentralized decision-making generally results in better access and retention for children (for example, Govinda and Bandyopadhyay, 2010). It is, however, not easy to get a community more involved in decision making. Evidence suggests that neither providing information for communities nor helping people from the community to gather information about education leads to

[3] A provision for decentralization and community participation in education was encouraged in the 73rd and 74th amendments to the constitution in the early 1990s.

greater community involvement in the education system or improved children's educational outcomes (Banerjee *et al.*, 2010).

In India, a lack of primary education, particularly in the Hindi-speaking northern states, used to be attributed to insufficient government commitment (Basu, 1995; Drèze and Sen, 1995), low budgets (Tan and Mingat, 1992; Drèze and Sen, 1995) and the general public's weak monitoring of education and indifference to education, in general, and primary education, in particular, (Drèze and Gazedar, 1996), among other reasons[4].

"Education for All" in India has intensified since the 1990s, partly due to the World Conference on Education in 1990 and a large inflow of external aid, especially World Bank loans to primary education since the 1990s. The provision of basic education became an election issue in the late 1990s. Legal provisions, like the enactment of the Right of Children to Free and Compulsory Education Act, 2009, might also have boosted participation in education. In this provision, children aged 6 to 14 have the right to a free education[5].

Nevertheless, approximately 14% of children aged 6 to 14 are still out of school in 2007-08 (Government of India, 2010). Apparently, education for all is still an unfinished task. At the same time, since the 1980s, it has become increasingly clear that the *de facto* privatization of education, reflected in the growing number of private schools, has become prominent in a large number of states, including the educationally backward states.

The private providers of schooling in recent years have emerged as a new issue. Since the government might not have enough resources to achieve education for all, private schools might be a welcome step so that more children can go to school. Some studies indicate that fee-paying private schooling is prevalent even in low-income areas. Tooley and Dixon (2006) remark on the growing number of private schools in notified slum areas in Hyderabad, which serve to educate children from low-income families,

[4] Until the constitutional amendment of 1976, each state government of India was in charge of primary education. Even today, each state has a different education system, including school age, upper and lower primary schooling years (although unified to 10 years in the total education for all states), number of school days per year, examination system, etc.

[5] Free and compulsory basic education from 6 to 14 years of age as a fundamental right was added to the 86th amendment in Constitution of India in 2002.

although this research does not define low income. In fact, an educational study of slum areas in Delhi found that few families could bear the expense of sending children to school (Tsujita, 2011), and 10 to 20 percent of them had dropped out by the end of the academic year in private, unrecognized schools due to their inability to pay the fees (Aggarwal and Chugh, 2003). If private schooling is a poor family's choice, we should learn under what circumstances children can be sent to school on a consistent basis.

Learning opportunities through non-formal education provided by the government and NGOs are also increasingly available for poor and disadvantaged children. This provision gives educational opportunities and wider options to those who would not have other opportunities to learn. At the same time, this type of provision in schooling can exclude the poor from the mainstream of formal schooling and ultimately from employment opportunities. This adds to poor people's difficulties when they try to get out of poverty.

5. Conclusions

Poverty alleviation is an important issue in developing countries, including India. The concept of poverty has recently been extended far beyond income poverty. Poverty is, nevertheless, still largely understood in monetary terms in the existing empirical examinations of the relationship between education and poverty. In the existing literature, it is largely found that the role of education in poverty alleviation should be understood in a specific context and time. At the same time, the quality and quantity of education a child can receive, therefore, are likely to affect a wide range of opportunities in the course of their life, and, worse still, such disparities reinforce the socio-economic status quo for future generations. When it comes to educating children, poverty associated with other disadvantages, such as caste, religion, gender and so on, as well as the schools in the community and surrounding communities, affects poor children's schooling and retention. A hierarchical division of school, reflecting the socio-economic status of the family has intensifies over the years in India. In this regard, children in poor households may have difficulties in getting out of poverty.

References

Aggarwal, Y. P. and S. Chugh (2003) "Learning Achievement of Slum Children in Delhi", Occasional Paper 34, New Delhi: National Institute of Educational Planning and Administration.

Al-Samarrai, S. and P. Bennel (2003) *Where has All the Education Gone in Africa?*,

Brighton: Institute of Development Studies at the University of Sussex.

Appleton, S. (2000) “Education and Health at the Households Level in Sub-Saharan Africa”, Working Paper 33, Center for International Development at Harvard University.

Banerjee, A., R. Banerji, E. Duflo, R. Glennerstern, S. Khemani (2010) “Pitfalls of Participation Programmes: Evidence from a Randamized Evaluation in Education in India”, *Economic Policy*, 2(1), pp. 1-30.

Banerji, R. (2000) “Poverty and Primary Schooling: Field Studies from Mumbai and Delhi”, *Economic and Political Weekly*, 35(10), pp. 795-802.

Banerjee, B. and J.B. Knight (1985) “Caste Discrimination in the Indian Labour Market”, *Journal of Development Economics*, 17, pp. 277-307.

Bardhan, P.K. (1989) *Conversation between Economists and Anthropologists: Methodological Issues in Measuring Economic Change in Rural India*, New Delhi: Oxford University Press.

Barro, R. (1991) “Economic Growth in a Cross Section of Countries”, *Quarterly Journal of Economics*, 106(2), pp. 407-443.

Basu, A. (1995) *Public Expenditure Decision Making: The India Experiences*, Thousand Oaks and New Delhi: Sage Publications.

Becker, G. S. (1993) *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Third Edition, University of Chicago Press.

Behrman, J. R. and N. Birdsall (1983) “The Quality of Schooling: Quantity Alone is Misleading”, *American Economic Review*, 73, pp. 928-948.

Behrman J.R. and A.B. Deolalikar (1988) “Health and Nutrition”, in Chenery H. and T.N. Srinivasan eds. Handbook of Development Economics, vol II, Amsterdam: Elsevier Science publishers.

Behrman, J.R., A. Foster, M. Rosenzweig, and P. Vashishtha (1999) “Women’s Schooling, Home Teaching, and Economic Growth”, *Journal of Political Economy*, 107 (4), pp. 682-714.

Behrman, J.R., and M. Rosenzweig (2002) “Does Increasing Women’s Schooling Raise the Schooling of the Next Generation?” *American Economic Review,* 92 (1), pp. 323-334.

Bennel, P. (1996) “Rates of Return to Education: Does the Conventional Pattern Prevail in Sub-Saharan Africa?”, *World Development*, 24(1), pp. 183-199.

Bennel, P., F. Mukyanuzi, M. Kasogela, F. Mutashubirwa and M. Klim (2006) “Artisan Training and Employment Outcomes in Tanzania”, *Compare*, 36(1), pp. 73-84.

Bharvaga, P. (2003) “The Threshold of Intergenerational Transfer of Poverty”, Paper for

International Conference on Staying Poor: Chronic Poverty and Development Policy, available at http://www.chronicpoverty.org/pdfs/2003conferencepapers/bhargava.pdf.

Bhatt, E. R. (2006) *We are Poor but So Many: the Story of Self-employed Women in India*, New York: Oxford University Press.

Bhide, S. and A. K. Mehta (2004) "Chronic Poverty in Rural India: Issues and Findings from Panel Data", *Journal of Human Development*, 5(2), pp. 195-209.

Bjornskov, C., A. Dreher, J.A.V. Fischer (2008) "Cross-country determinants of life satisfaction: Exploring Different Determinants across Groups in Society", *Social Choice and Welfare* 30, pp. 119- 173.

Black, S.E., P.J. Deverux, and K.G. Salvanes (2005) "Why the Apple Doesn't Fall Far: Understanding Intergenerational Transmission of Human Capital", *American Economic Review*, 95 (1), pp. 437- 449.

Borooah, V.K. and S. Iyer (2005) "Vidya, Veda and Barna: The Influence of Religion and Caste on Education in Rural India", *Journal of Development Studies*, 41 (8), pp. 1369- 1404.

Bowles, S. and H. Gintis (1976) *Schooling in Capitalist America: Education Reform and the Realities of Economic Life*, London: Routledge and Kegan Paul.

Bowles, S. and H. Gintis (1995) "Agency and Efficiency Wage Theory" in Carnoy, M. ed. *International Encyclopedia of Economics of Education*, Second Edition, Pergamon.

Breton, T. R. (2004) "Can Institutions or Education Explain World Poverty? An Augmented Solow Model Provides Some Insights", *Journal of Socio-Economics*, 33, pp. 45-69.

Camfield, L., K. Choudhury, J. Devine (2009) "Well-being, Happiness and Why Relationships Matter: Evidence from Bangladesh", *Journal of Happiness Studies* 10 pp. 71-91.

Chambers, R. (1997) *Whose Reality Counts?: Putting the First Last*, London: Intermediate Technology.

Colclough, C. with Lewin, K.M (1993) *Educating All the Children: Strategies for Primary Education in the South*, Oxford: Oxford University Press.

Colclough, C., S. Al-Samarrai, P. Rose and M. Tembon (2003) *Achieving Schooling for All in Africa: Costs, Commitment and Gender*, Aldershot: Ashgate Press.

Colclough, C., G. Kingdon and H. Patrinos (2010) "The Changing Pattern of Wage Returns to Education and its Implications", *Development Policy Review*, 28 (6), pp. 733- 747.

Davis, P. (2006) "Poverty in Time: Exploring Poverty Dynamics from Life History Interviews in Rural Bangladesh", CPRC Working Paper 69.

Davis, P. and B. Baluch (2011) “Parallel Realities: Exploring Poverty Dynamics Using Mixed Methods in Rural Bangladesh”, *Journal of Development Studies*, 47 (1) pp. 118- 142.

Deaton, A. (1997) *The Analysis of Household Surveys: A Macro Economic Approach to Development Policy*, Baltimore and London: Johns Hopkins University Press.

Deaton, A. (2003) “Adjusted Indian Poverty Estimates for 1999-2000”, *Economic and Political Weekly*, 38(4), pp.322-324.

Deaton, A. (2006) “Measuring Poverty” in Banerjee, A.V., R. Bénabou and D. Mookherjee eds. *Understanding Poverty*, New York: Oxford University Press.

Dhamija, N. and S. Bhide (2010) “Dynamics of Poverty in India: A Panel Data Analysis”, *Economic and Political Weekly*, 45 (13), pp. 91- 96.

Diener, E., E.M. Suh, R. E. Lucas and H.L. Smith (1999) “Subjective Well-Being: Three Decades of Progress”, *Psychological Bulletin*, 125 (2), pp. 2760 302.

Diener, E. and M. E. P. Seligman (2004) “Beyond Money: Towards and Economy of Well-being”, *Psychological Science in the Public Interest*, 5 (1), pp. 1- 31.

Dore, R.P. (1976) “Human Capital Theory, The Diversity of Societies and the Problems of Quality in Education”, *Higher Education*, 5, pp. 79-102.

Drèze J. and A. Sen (1995) *India: Economic Development and Social Opportunity*, New Delhi: Oxford University Press.

Drèze, J. and H. Gazedar (1996) “Uttar Pradesh: The Burden of Inertia”, in Drèze J. and A. Sen eds. *Indian Development: Selected Regional Perspectives*, New Delhi: Oxford University Press.

Drèze, J. and G. G. Kingdon (2001) “School Participation in Rural India”, *Review of Development Economics*, 5(1) pp. 1-24.

Duraisamy, P. (1988) “An Econometric Analysis of Fertility, Child Schooling and Labour Force Participation of Women in Rural Indian Households”, *Journal of Quantitative Economics*, 4(2), pp. 293-316.

Duraisamy, P. (2002) “Changes in Return to Education in India, 1983-94: by Gender, Age-Cohort and Location”, *Economics of Education Review*, 21, pp. 609-622.

Dutta, P. V. (2006) “Returns to Education: New Evidence for India, 1983- 1999”, *Education Economics*, 14 (4), pp. 431- 451.

Dyer, C. and P. Rose (2008) *Chronic Poverty and Education: A Review of the Literature*, Chronic Poverty Research Centre, Working Paper 131.

Fafchamps, M. and F. Shilpi (2008) “Subjective Welfare, Isolation, and Relative Consumption”, *Journal of Development Economics*, 86 (1), pp. 43-60.

Fine, B. and P. Rose (2001) “Education and the Post-Washington Consensus”, in Fine,

B., C. Lapavitsas and J. Pincus eds. *Development Policy in the Twenty-first Century: Beyond the Post-Washington Consensus*, Roudledge Studies in Development Economics, London and New York: Routledge.

Freire, P. (1970) *Pedagogy of the Oppressed*. New York: Continuum.

Frey, B.S. and A. Stutzer (2002) *Happiness and Economics*, Princeton and Oxford: Oxford University Press.

Foster, A.D. and M.R. Rosenzweig (1995) "Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture", *Journal of Political Economy*, 103 (6), pp. 1176- 1209.

Gaiha, R. (1989) "Are the Chronically Poor Also the Poorest in Rural India", *Development and Change*, 20, pp.295-322.

Gaiha, R and A. B. Deolalikar (1993) "Persistent, Expected and Innate Poverty: Estimates for Semi-arid Rural South India, 1975-1984", *Cambridge Journal of Economics*, 17, pp. 409-421.

Gaiha, R. and K. Imai (2004) "Vulnerability, Shocks and Persistence of Poverty-Estimates for Semi-Arid Rural South India", *Oxford Development Studies*, 32 (2) pp. 261-281

Glewwe, P. (2002) "Schools and Skills in Developing Countries: Education Policies and Socioeconomic Outcomes", *Journal of Economic Literature*, 40(2), pp. 436-482.

Glewwe, P. and Kremer, M (2006) "Schools, Teachers, and Education Outcomes in Developing Countries", in *Handbook of the Economics of Education*, vol.2, Elsevier.

Government of IndiaPlanning Commission (2009) *Report of the Expert Group to Review the Methodology for Estimation of Poverty*, November 2009.

Government of India, National Sample Survey Office (2010) *Education in India: 2007-08 Participation and Expenditure*, NSS 64th Round (July 2007- June 2008).

Govinda, R. ed. (2011) *Who goes to School?: Exploring Exclusion in Indian Education*, New Delhi: Oxford University Press.

Govinda, R. and M. Bandyopadhyay (2010) "Changing Framework of Local Governance and Community Participation in Elementary Education in India", Consortium for Research, on Educational Access, Transitions and Equity.

Gradstein, M., M. Justman and V. Meier (2004) *The Political Economy of Education: Implication for Growth and Inequality*, Cambridge, MA: MIT Press.

Graham, C. and A. Felton (2006) "Inequality and Happiness: Insights from Latin America", *Journal of Economic Inequality,* 4 (1), pp. 107- 122.

Haq, M. (1995) *Reflections on Human Development*, Expanded Edition, New York; Oxford University Press.

Harper, C., R. Marcus and K. Moore (2003) “Enduring Poverty and the Conditions of Childhood Lifecourse and Intergenerational Poverty Transmissions”, *World Development*, 31(3), pp. 535-554.

Harper, C., N. Jones, P. Pereznieto, and A. McKay (2011) Promoting Children’s Well-being: Policy Lessons from Past and Present Economic Crises”, *Development Policy Review*, 29 (5), pp. 621- 641.

Harper, C., N. Jones, P. Pereznieto and A. Mckay (2011) “Promoting Children’s Well-being” Policy Lessons from Past and Present Economic Crises”, *Development Policy Review*, 29 (59), pp. 621- 641.

Harriss-White, B. (2003) *India Working: Essays on Society and Economy*, Cambridge: Cambridge University Press.

Hulme D. and A. McKay (2005) “Identifying and Measuring Chronic Poverty: Beyond Monetary Measures”, CPRC-IIPA Working Paper 30.

Hulme, D. and J. Toye (2006) “The Case for Cross-Disciplinary Social Science Research on Poverty, Inequality and Well-being”, *Journal of Development Studies*, 42 (7) pp. 1085- 1107.

Husain, Z. (2005) “Analyzing Demand for Primary Education: Muslim Slum Dwellers of Kolkata”, *Economic and Political Weekly*, 40 (2), pp. 137-147.

Jacoby, H. G. and E. Skoufias (1997) “Risk, Financial Markets, and Human Capital in a Developing Country”, *Review of Economic Studies*, 64 (3), pp. 311- 335.

Jayaraman, R. and P. Lanjouw (1999) “The Evolution of Poverty and Inequality in Indian Villages”, *World Bank Research Observer*, 14(1), pp.1-30.

Jha, J. and D. Jhingram (2005) *Elementary Education for the Poorest and Other Deprived Groups: Real Challenge of Universalization*, Delhi: Manohar.

Jimenez, E. (1995) “Human and Physical Infrastructure: Public Investment and Pricing Policies in Developing Countries”, in Behrman J. and T. N. Srinivasan eds. *Handbook of Development Economics*, vol.III, Amsterdam: Elsevier Science Publisher, pp. 2773-2843.

Jodha, N.S. (1988) “Poverty Debate in India: A Minority View”, *Economic and Political Weekly*, 23(45/46/47), pp. 2421-2428.

Kabeer, N. and S. Mahmud (2009) “Imagining the Future: Children, Education and Intergenerational Transmission of Poverty in Urban Bangladesh”, *IDE Bulletin*, 40 (1), pp. 10- 21.

Kanbur, R. (2002) “Economics, Social Science and Development”, *World Development*, 30(3), pp.477-486.

Kanbur, R. and P. Shaffer (2007) “Epistemology, Normative Theory and Poverty

Analysis: Implications for Q-Squared in Practice", *World Development*, 35 (2), pp. 183- 196.

Kijima, Y. (2006) "Why did Wage Inequality Increase? Evidence from Urban India 1983- 99", *Journal of Development Economics*, 81 (1), pp. 97- 117.

King, K., R. Palmer and R. Hayman (2005) "Bridging Research and Policy on Education, Training and Their Enabling Environments", *Journal of International Development*, 17, pp. 803-817.

Kingdon, G. (1996) "The Quality and Efficiency of Private and Public Education: A Case Study of Urban India", *Oxford Bulletin of Economics and Statistics*, 58 (1), pp. 57-82.

Kingdon, G. G. (1998) "Does the Labour Market Explain Lower Female Schooling in India?", *Journal of Development Studies*, 35(1), pp. 39-65.

Kingdon, G.G. (2007) "The Progress of School Education in India", *Oxford Review of Economic Policy*, 23 (2) pp. 168- 195.

Kingdon, G. G. and J. Knight (2006) "Subjective Well-being Poverty versus Income Poverty and Capabilities Poverty?", J*ournal of Development Studies*, 42(17), pp. 1199-1224.

Kingdon, G. G. and J. Knight (2007) "Community, Comparisons and Subjective Well-being in a Divided Society", *Journal of Economic Behavior and Organization*, 64 (1), pp. 69- 90.

Kingdon, G. G. and Unni, J. (2001) "Education and Women's Labour Market Outcomes in India", *Education Economics*, 9(2), pp. 173-195.

Laderchi, C.R., R. Saith and R. Stewart 2003. "Does it Matter that We do not Agree on the Definition of Poverty? A Comparison of Four Approaches", *Oxford Development Studies*, 31 (3), pp. 243-274.

Lauglo, J. (1996) "Banking on Education and the Uses of Research A Critique of: World Bank Priorities and Strategies for Education", *International Journal of Educational Development*, 16(3), pp.221-233.

Lewin, K. M. (1993) *Education and Development: The Issues and the Evidence*, Education Research Serial No. 6. London: Overseas Development Administration.

Lipton, M. and S. Maxwell (1992) "The New Poverty Agenda: An Overview", Institute of Development Studies Discussion Paper 306.

Lipton, M. and M. Ravallion (1995) "Poverty and Policy", in Behreman, J. and T. N. Srinivasan eds. *Handbook of Development Economics*, 3B, Amsterdam: North-Holland.

Lokheed, M., D. Jamison and L. Lau (1980a) "Farmer Education and Farm Efficiency:

A Survey" in King T. ed. *Education and Income*, World Bank Staff Working Paper No. 402.

Lokheed, M. D. Jamison and L. Lau (1980b) "Farmer Education and Farm Efficiency: A Survey", *Economic Development and Cultural Change*, 29(1), pp. 37-76.

Malathy, R. (1989) "Labour Supply Behaviour of Married Women in Urban India", Yale University Economic Growth Center Discussion Paper No. 585.

McMahon, W. W. (1999) *Education and Development: Measuring the Social Benefits*, New York: Oxford University Press.

Mehrotra, S. (2006) "What Ails the Educationally Backward States? The Challenge of Public Finance, Private Provision and Household Costs", in Mehrotra, S. ed. *The Economics of Elementary Education in India: The Challenge of Public Finance, Private Provision and Household Costs*, New Delhi: Sage.

Michaelowa, K. (2001) "Primary Education Quality in Francophone Sub-Saharan Africa: Determinants of Learning Achievement and Efficiency Considerations", *World Development*, 29(10), pp. 1699-1716.

Mincer, J. (1974) *Schooling, Experience, and Earnings*, New York and London: Colombia University Press for National Bureau of Economic Research.

Narayan, D., R. Chambers, M. K. Shah and P. Petesch (2000a) *Voices of the Poor, Crying Out for Change*, New York: Oxford University Press for World Bank.

Narayan, D. with R. Patel, K. Schaffe, A. Rademacher and S. Koch-Schulte (2000b) *Voices of the Poor, Can Anyone Hear Us*?, New York: Oxford University Press for World Bank.

Narayan, D. and P. Petesch (2002) *Voices of the Poor From Many Lands*, New York: Oxford University Press for World Bank.

Petrakis, P.E. and Stamakis, D. (2002) "Growth and Education Levels: A Comparative Analysis", *Economics of Education Review*, 21, pp. 513-521.

Plug, E. (2004) "Estimating the Effect of Mother's Schooling on Children's schooling Using a Sample of Adoptees", *American Economic Review*, 94 (1), pp. 358- 368.

Poot, J. (2000) "A Synthesis of Empirical Research on the Impact of Government on Long-run Growth", *Growth and Change*, 31, pp. 516-547.

Pradhan, M and M. Ravallion (2000) "Measuring Poverty Using Qualitative Perceptions of Consumption Adequacy", *Review of Economics and Statistics*, 82 (3), pp. 462-471.

Pritchett, L. (2001) "Where has All the Education Gone?", *World Bank Economic Review*, 15 (3), pp. 367-391.

PROBE (1999) *Public Report on Education in India*, New Delhi: Oxford University Press.

Psacharopoulos, G. (1979) “On the Weak versus the Strong Version of the Screening Hypothesis”, *Economic Letters*, 4, pp. 181-185.

Psacharopoulos, G. (1994) “Return to Investment in Education: A Global Update”, *World Development*, 22(9), pp. 1325-1343.

Psacharopoulos, G. and H. A. Patrinos (2002) “Return to Investment in Education: A Further Update”, Policy Research Working Paper 2881, World Bank.

Ravallion, M. (1998) *Poverty Lines in Theory and Practice*, LSMS Working Paper 133, Washington D.C.: World Bank

Ravallion, M. and M. Lokshin (2010) “Who cares about Relative Deprivation?” Journal of Economic Behavior & Organization, 73 (2), pp. 171- 185

Romer, P. M. (1990) “Endogenous Technical Change”, *Journal of Political Economy*, 98 (5), Part 2, pp. S71-S102.

Rose, P. and C. Dyer (2008) *Chronic Poverty and Education: A Review of the Literature*, Chronic Poverty Research Centre, Working Paper 131.

Rosenzweig, M. R. (1995) “Why are there Return to Schooling?”, *American Economic Review*, 85 (2), pp. 153- 158.

Rustagi, P. (2009) *Concerns, Conflicts, and Cohesions: Universalization of Elementary Education in India*, New Delhi: Oxford University Press.

Saith, R. (2007) “Capabilities: The Concept and its Implementation” in Stewart, F. R. Saith and B. Harriss-White eds. *Defining Poverty in the Developing World*, New York and Basingstoke: Palgrave-Macmillan.

Samoff, J. (1996) “Which Priorities and Strategies for Education?”, *International Journal of Educational Development*, 16(3), pp. 249-271.

Santhapparaj, A. S. (1996) “Job Search and Earnings of Migrants in Urban Labour Market: A Study of Madurai Metropolis”, *Indian Journal of Labour Economics*, 39(2), pp. 269-86.

Schultz, T. (1963) *The Economic Value of Education*, Columbia University Press.

Sen, A. (1981) *Poverty and Famines: An Essay on Entitlement and Deprivation*, Oxford: Claredon Press.

Sen, A. (1985) *Commodities and Capabilities*, Amsterdam: North Holland.

Sen, A. (1999) *Development as Freedom*, New York: Alfred A. Knof

Sen, A and Himanshu (2004a) “Poverty and Inequality in India I”, *Economic and Political Weekly*, 39 (38), pp.4247-4263.

Sen, A and Himanshu (2004b), “Poverty and Inequality in India II”, *Economic and Political Weekly*, 39 (39), pp.4361-4375.

Shavit, Y., W. Müller and S. Muller (1998) *From School to Work: A Comparative Study*

of Educational Qualifications and Occupation, Oxford: Clarendon Press.

Sklwester, K. (2000) "Income Equality, Education Expenditure and Growth", *Journal of Development Economics*, 63, pp. 379-398.

Spence, M. A. (1973) "Job Market Signaling", *Quarterly Journal of Economics*, 87, pp. 335-374.

Strauss, J and D. Thomas (1995) "Human Resources: Empirical Modeling of Household and Family" (Chapter 35) in Behruman, J.R. and T.N. Srinivasan eds. Handbook of Development Economics, vol. 3A, North-Holland.

Stewart, F. R. Saith and B. Harriss-White eds. (2007) *Defining Poverty in the Developing World*, New York and Basingstoke: Palgrave-Macmillan.

Streeten, P.P. (1979) "Basic Needs: Premises and Promises", *Journal of Policy Modeling*, 1 pp. 136-146, World Bank Reprinted Series No. 62.

Stromquist, N. (1998) "Agents in Women's Education: Some Trends in the African Context", in Bloch, M., J. Beoku-Betts and R. Tabachnik eds. *Women and Education in Sub-Saharan Africa: Power, Opportunities and Constraints*, Colorado: Lynne Rienner Publisher.

Sundaram, K. and S. D. Tendulkar (2003a) "Poverty *has* declined in the 1990s: A Resolution of Comparability Problems in NSS Consumer Expenditure Data", *Economic and Political Weekly*, 38(4), pp.327-337.

Sundaram, K. and S. D. Tendulkar (2003b) "Poverty among Social and Economic Groups in India in 1900s", *Economic and Political Weekly*, 38(59), pp. 5293-5276.

Swaminathan, M. (1999) "The Determinants of Earnings among Low-Income Workers in Bombay: An Analysis of Panel Data", *Journal of Development Studies*, 33(4), pp. 535-551.

Tan, J. and A. Mingat (1992) *Education in Asia: A Comparative Study of Cost and Financing*, Washington D.C.: World Bank.

Taubman, P. and M. L. Wachter (1986) "Segmented Labour Market" in Ashenfelter A. and R. Layard eds. *Handbook of Labor Economics*, Volume II, London: Elsevier Science Publishers.

Tilak, J.B.G. (2007) "Post-elementary Education, Poverty and Development in India", *International Journal of Educational Development*,27 pp. 435- 455.

Tilak, J.B.G. (2009) Universalizing Elementary Education: A Review of Progress, Policies and Problems, in Rustagi, P. ed. *Concerns Conflicts, and Cohesions: Universalization of Elementary Education in India*, New Delhi: Oxford University Press.

Tooley, J. and P. Dixon (2006) "'De facto' Privatization of Education and the Poor:

Implications of a Study from Sub-Saharan African and India", *Compare*, 36(4), pp. 443-462.

Tsujita, Y. (2011) "The Implication of Migration and Schooling for Urban Educational Disparity: A Study of Delhi Slum Children" in Hirashima, H., H. Oda and Y. Tsujita eds. *Inclusiveness in India: A Strategy for Growth and Equality*, Palgrave-Macmillan, Basingstoke and New York.

Tueros, M. (1995) "Education and Informal Labour Markets", in in Carnoy, M. ed. *International Encyclopedia of Economics of Education*, Second Edition, Pergamon.

UNESCO (2005) *Children out of School. Measuring Exclusion from Primary Education*, Montreal: UNESCO Institute of Statistics/UNICEF.

UNESCO (2010) *Education for All Global Monitoring Report: Reaching the Marginalized*, Paris: UNESCO and Oxford: Oxford University Press.

UN Millennium Project (2005) *Toward Universal Primary Education: Investments, Incentives and Institutions*, London: Earthscan.

Unni, J. (1995) "Return to Education by Gender among Wage Employees in Urban India", Gujarat Institute of Development Research Working Paper No. 63.

Van Praag, B. and A. Ferrer-i-Carbonell (2004) *Happiness Qualified: A Satisfaction Calculus Approach*, Oxford: Oxford University Press.

Wager, D. A., J.E. Spratt, G.D. Klein and A. Essaki (1989) "The Myth of Literacy Relapse: Literacy Retention among Moroccan Primary School Leavers", *International Journal of Educational Development*, 9(4), pp. 307-315.

Walker, T. S. and J. G. Ryan (1990) *Village and Household Economies in India's Semi-arid Tropics*, Baltimore and London: Johns Hopkins University Press.

Watkins, K. (2000) *Oxfam Education Report*, Oxford: Oxfam.

World Bank (1993) *The East Asian Miracle: Economic Growth and Public Policy*, New York: Oxford University Press.

World Bank (1995) *Priorities and Strategies for Education*, Washington D.C.: World Bank

World Bank (2001) *World Development Report 2000/01: Attacking Poverty*, New York: Oxford University Press.

World Bank (2011) *World Development Report 2011: Conflict, Security, and Development*, New York: Oxford University Press.