

GIDR WORKING PAPER SERIES

No. 186: September 2008

Are Gender Differentials in Educational Capabilities Mediated through Institutions of Caste and Religion in India?

Jeemol Unni



**Gujarat
Institute of
Development
Research**

Working Paper No. 186

**Are Gender Differentials in Educational Capabilities
Mediated through Institutions of Caste and Religion in India?**

Jeemol Unni

September 2008

**Gujarat Institute of Development Research
Gota, Ahmedabad 380 060**

Abstracts of all GIDR Working Papers are available at the Institute's website.
Working Paper No 121 onwards can be downloaded from the site

All rights reserved. This publication may be used with proper citation and due acknowledgement to the author(s) and the Gujarat Institute of Development Research, Ahmedabad.

© Gujarat Institute of Development Research

First Published	September 2008
ISBN	81- 89023-40-3
Price	Rs. 40.00

Abstract

The mainstream approach in economics of education is the human capital model, based on the concept of maximization of a utility function. As opposed to this, Sen and Nussbaum have proposed a capabilities approach to view various states of well-being, including access to and use of education. The Capabilities Approach shifts the conceptual terrain from resources and opportunities as ends in themselves, to focus on the substantive freedom people have to convert resources into 'valued doings and beings'. While the utility approach assesses the resources and opportunities to achieve functionings, such as going to school, the capabilities approach assesses the motivations and freedom people have to formulate capabilities. It therefore, encourages us to ask a wider range and more probing questions than the utility approach.

The starting point for this paper is that the motivations and freedoms of choice are mediated through institutions of caste and religion. It restricts the freedom, more so of women, and places a low value on education. We explore indicators for the motivation behind poor school attendance and poor educational attainments based on the institutional context. We note that poor school infrastructure, domestic work, child labour, early marriage and child birth and perceptions of parents motivated through institutions of caste and religion influence poor attendance of girl children in school. Similarly, caste and religion also motivate poor educational attainments through higher drop out rates, poor reading skills and poor access to media among girls. These explanations for the achieved functionings of schooling by gender help to identify 'conversion factors' not typically addressed in the utility approach. The capabilities approach may have an important public policy role to play as research on the dynamics of capability failure could be used to improve education policy design and, in turn, educational outcomes for girls from disadvantaged caste and religious communities.

JEL Classification : I20, I31, J24

Key words : Education, Capabilities approach, human capital, caste, religion

Acknowledgements

An earlier version of the paper was presented at the Annual Conference of the Human Development and Capability Association (HDCA) on *Equality, Inclusion and Human Development*, New Delhi, 10-13 September 2008. The author acknowledges the comments of the participants at the Conference and G. Omkarnath and Elizabeth Hill for reviewing the earlier version of the paper. Usual disclaimers apply.

Contents

	Page No
Abstract	i
Acknowledgements	i
Contents	ii
List of Tables	ii
List of Figures	ii
1. Introduction	1
2. Utility Approach versus the Capabilities Approach	1
3. Human Capital Approach	3
4. Capabilities Approach to Education	5
5. Indicators of institutional mediation behind low value placed on education	6
5.1. Why poor school attendance?	8
5.2. Why poor educational attainments?	12
6. Conclusion	15
References	16

List of Tables

	Page No
1: Education and Work by Gender, Location and Social Group, 2004-05	7

List of Figures

	Page No
1: Share of Boys and Girls in Principal Work, Attending Education and Domestic Duties (Usual Principal Status) by Age Group, Location and Gender, 2004 - 2005	9
2: Incidence of Out of School Children and Child Labour (5 - 14 Years) across Socio-religious Groups, 2004 - 2005	9

Are Gender Differentials in Educational Capabilities Mediated through Institutions of Caste and Religion in India?

Jeemol Unni*

1. Introduction

The mainstream approach in economics to education is the human capital model. This is based on the concept of maximization of a utility function. As opposed to this, Sen (1987) and Nussbaum (2000) have proposed a capabilities approach to view various states of well-being, including access and use of education. Sen's Capabilities Approach shifts the conceptual terrain from resources and opportunities as ends in themselves, to focus on the substantive freedom people have to convert resources into 'valued doings and beings'.

In this paper, with empirical data, we use the Capabilities Approach to identify 'conversion factors' that are not typically addressed in the utility approach. We juxtapose the two approaches to examine how institutions such as caste and religion mediate access and returns to education of men and women. The effort is to discuss whether, the capabilities approach provides any advantage in addressing questions of inequity that may be mediated through such institutions. The main innovation in this paper is a comparison between the knowledge generated through use of traditional data sources to measure access and returns to education compared with knowledge about the dynamics of capability formation generated through a mixture of traditional quantitative and some qualitative data within the capabilities approach.

2. Utility Approach versus the Capabilities Approach

The term utility is used to mean different things and loosely implying anything having value. Utility has been viewed as 'happiness' as well as 'desire-fulfillment' and both can be taken as guides of a person's well-being. Sen (1987) took exception to the view of utility as a real-valued (i.e. numerical) representation of choice. He questioned this approach of the binary relation of choice reflecting the person's well-being "an approach that goes back to the origin of the 'revealed preference' school". This approach is deficient in analyzing the motivation behind this choice. It makes the heroic assumption that the binary relation underlying choice must be the ordering of the person's own well-being.

* Professor, GIDR, Ahmedabad, E-mail: jeemolunni@yahoo.co.in, jeemol@gidr.ac.in

In an earlier work, Sen (1983) had introduced the concept of a person's capabilities to be and to do things of intrinsic worth, i.e. resources adequate to achieve a specified set of functionings. *Functionings* or “states of being” could range from elementary states (being nourished, going to school) to complex personal states and activities (participation/appearing without shame). Sen's capability approach emphasized that what mattered to people was 'the actual living that people manage to achieve'. He argued that “when we make interpersonal comparisons of wellbeing we should find a measure which incorporates references to functionings, that is what is achieved, but also reflects the intuition that what matters is not merely achieving the functioning but being free to achieve it” (Unterhalter, 2003). “He favoured the capability to function as the criterion for assessing the standard of living, and by implication poverty, rather than the utility that might be derived from using that capability. Thus, Sen eschewed the welfarist approach to poverty with its underlying assumption that the evaluative criterion is the utility that people derive from goods and services. However, he neither offered a practical criterion for evaluating the various capabilities to function nor sought any aggregation of the social values of the separate capabilities” (Kingdon and Knight, 2003).

Sen shifts the argument from resources and opportunities to achieve functionings, e.g. going to school, to the need to look at the freedom people have to formulate capabilities 'valued doings and beings' and thus convert resources into functionings they value. “Thus agency and freedom to make up one's mind about schooling as a valued end and convert one's aspirations regarding schooling into valued achievements lie at the heart of Sen's capability approach and distinguish it from other positions” (Unterhalter, 2003).

The capability approach to education requires us to think about gendered constraints on functionings and freedoms in educational institutions such as schools. Further, even when girls complete 12 years of schooling they encounter problems of discrimination in the food they eat, in access to employment and work-place, and their contribution to family-decision making or public debate. Measures such as 'years of schooling' used extensively in human capital theory by no means capture these values. What if women do not claim education because they reflect what the society expects of them? The approach encourages “an examination of the ways in which gendered institutions prevent women converting capabilities into functionings”.

While it is easy to point out the difficulties with the traditional measures of education, it is difficult to visualize a measure using the capabilities approach. As we know in most multi-ethnic developing societies, certain groups and women are silenced. We attempt to identify “conversion factors”, e.g. institutions of caste and religion that may prevent women from converting resources to “functioning”, in this case education. Further, the intrinsic value of education could be measured as access to media, newspapers, standing for local government, participation in discussions, freedom from discrimination, etc.

3. Human Capital Approach

The human capital approach has at its core the maximization of utility functions. This is a very popular approach to analyzing access and returns to schooling. Traditionally some of the questions asked through this approach have been who is schooled, what are the returns to education? Also through inclusion of independent variables in the participation functions it seeks to ask the question whether institutions such as caste and religion affect who obtains education and with separate earnings functions whether there are differences in the returns to education by gender and by these institutions.

The determinants of schooling analyzed through this approach begin with a utility function where parents are assumed to maximize utility subject to a budget constraint. A demand for schooling function is derived from this maximization of utility function, which depends on the price or cost of schooling, income and a set of control variables, mainly household, child and parent's characteristics. A probability function of enrolment of a child in school and a grade attainment function help to understand the determinant of schooling. Using this method for Tamil Nadu Doraisamy (2001) found that parent's education and household's prosperity emerge as important determinants. The availability of schools and higher adult literacy in the village show better schooling outcomes. Girl's participation in schooling is negatively affected by the presence of young siblings, and the number cattle in the household, while having an educated mother improves her chances. Teacher training had an impact on grade attainment of students.

Juxtaposing the choice among children of school enrolment and work participation Doraisamy (2007) engaged a similar utility maximization approach and estimated maximum likelihood probit estimates. While boy's education was favoured, the parent's education and household income had positive impact on enrolment over work

participation. She concludes that the greater the resources of the household, the higher the demand for children's schooling and less the need for child work to supplement incomes. The influence of institutions like caste and religion is investigated through dummy variables, with children from scheduled castes and tribes less likely to attend school. The religion dummy indicates a uniform negative effect for child schooling compared to the reference category of other religions.

The major limitation of this method is that it assumes that children have choice. The motivation behind the obtained outcome is not investigated, except to say that certain characteristics of parent's and the household can affect the outcome. The actual perception of the child or his/her value for education and the motivation for why SC/ST children are less likely to attend school are not delved into in this method.

Another question that the economics of education literature using the utility approach asks is what are the returns to education? The traditional literature has observed a decreasing returns to education and higher returns to female education (Psacharopoulos, 1994). This has been used to justify policies for higher investments in elementary schooling and women's education. However, similar literature in India noted increasing returns to education or higher level of education had higher returns (Unni, 1996; Kingdon and Unni, 2001). The returns to female education have been found to be higher than male education in India as well.

Efforts to study the impact of institutions of caste and religion on returns to education using a similar methodology (Unni, 2007) found that returns were higher for the scheduled castes (SC) and tribe (ST) population compared to the Muslims. This was attributed to the fact that affirmative action in India has favoured jobs for the scheduled castes and tribe population, while the Muslim population do not benefit from any such backing.

While these results appear intuitively correct, it fails to answer the question as to why such high returns do not encourage higher female participation in schooling and also greater participation by the scheduled castes and tribe population, as we shall see later. Again the critique remains the same as for child schooling. That is, the utility approach concentrates on the outcome of education subject to some constraints, but does not investigate the motivation for or whether the person actually has the ability to choose.

Given this, what are the institutional constraints placed on women and particular caste and religious groups that prevent them from accessing education and jobs with better returns?

In a recent paper Kingdon and Theopald (2008) have used the human capital utility approach further to ask the question whether the demand for schooling actually depends on economic returns to education in the local labour market. It is argued that economic returns can have a positive substitution effect, that is higher return would mean greater participation in schooling. However, economic returns to education could have a negative income effect due to higher opportunity cost of labour in the current period. That is, household may not be willing to forego the extra incomes from labour of children for a longer term higher returns to education. They further noted that higher economic returns had a positive substitution effect for girls and, while the negative income effect was stronger for boys in poorer households in India. This they attributed to the fact that girl's education was substituted by household work, while boys participated in economic activity and earned supplementary incomes for the household.

This result does not appear intuitively correct, nor is it empirically substantiated by the data on school attendance. The higher female returns to schooling should have encouraged greater school attendance among girls, but instead it is the boys who have higher attendance rates. In 2004-05 the current attendance of boys in the age groups 5-14 years was 84.7 percent while for girls it was 79.2 percent (NSSO, 2006). Similarly the net attendance ratios for 2005-06 in primary school (standards 1-5) was 73.2 percent for boys and 70.5 percent for girls, while it was 56.8 percent for middle, secondary and higher secondary school for boys and 45.6 for girls (NFHS-3, 2007).

While the utility approach does provide some broad insights and direction of relationships of social and economic constraints on education, it is deficient in explanations for the motivation of the results obtained. It might also lead to wrong diagnosis for policy without an understanding of what drives the relationships observed.

4. Capabilities Approach to Education

What is it that the capabilities approach allows us to ask or analyze that gives us a better understanding of the economic and social dimension of education? In the utility approach it is assumed that people are free to choose, given the constraints of budget. The capabilities approach discusses the ability of the person to choose what he or she

values, that is, what is the motivation behind this choice. The argument in the latter approach is shifted from resources and opportunities to acquire education to discussing the motivation for the choice or the freedom to formulate the capabilities. That is, the focus shifts to how to convert resources into functionings (outcomes) that people value.

The starting point for the capability approach is a focus on how social context sets the conditions for individual freedoms. In the case of education how free are men and women, boys and girls to access education of their choice given the institutional dominance of caste and religion in India? The advantage of the capabilities approach is that it invites a wider range of more searching questions with regard to gender equality than just a focus on outcomes.

One of the challenges to the capabilities approach is to devise and measure 'conversion factors'. What variable can define the institutional dominance of caste/religion in the motivation of boys and girls to pursue education? A related issue noted by Sen is the type of data used for assessing well-being, in this case education. He suggests three types of data: market purchase data, responses to questionnaire and non-market observations of personal states (Sen, 1987). The utility approach uses market purchase data for a bundle of goods and services that is bought and sold in the market, including education. Non-market items such as fertility, or the choice of having children, are modeled using the non-market observation of personal states, number of children.

The third method of responses to questionnaires has been viewed with mistrust in the economic literature on the ground that such information is subjective. However, this method has been increasingly used in recent years even in the utility approach (for instance, Kingdon and Knight, 2003 use it to measure well-being). Non-market state and the questionnaire method are useful types of data to construct variables to explain the motivations behind value of education. In the rest of the paper we shall attempt to garner some evidence using mainly these two types of data to better understand whether gender differentials in capabilities in education are mediated through institutions of caste and religion?

5. Indicators of institutional mediation behind low value placed on education

While there could be many reasons for the low value placed on accessing education and the gender bias in it, in spite of high economic returns, in this paper we shall focus

only on the institution of religion and caste operating to restrict freedoms of individual to choose. The society in India is stratified by social groups in terms of caste and religion. This system is hierarchical and certain historically vulnerable groups have remained at the bottom of the economic and social pyramid.

In an apparently liberal and democratic society the access to education and capacity to stay within the formal educational system to acquire higher levels of education are limited for the SC/ST and Muslim community. There is systemic curtailment of freedom and agency operating on these communities to choose the way out of poverty through education. Besides whether you belong to the lower castes, the choice of education is further restricted by gender and location. Being a girl/woman living in rural areas as well as belonging to the SC/ST community ensures she is triply crippled. While only 15 percent of boys in the age group of 5-15 years were out of school, nearly 21 percent of the girls were so. As though the lack of freedom to choose education if one was a girl was not enough, girls living in rural areas (24 percent) and belonging to SC/ST households (28.5 percent were out of school) had even more restricted choices (Table 1). This discrimination in the early age then handicaps them when they enter the labour market, leading to jobs with lower earnings and status. The number of years of schooling men and women workers in these groups was able to access reduced systematically from 5.4 years for men to 1.2 for women located in rural areas and belonging to the scheduled castes and tribes. The choice of having had a good education gets progressively worse for women in the unorganised sector carrying the triple burden of gender, rural location and belonging to the SC/ST community compared to men.

Table 1: Education and Work by Gender, Location and Social Group, 2004-05

Indicators	Male	Female	Rural Female	Rural Female SC/ST
1. Share of out of school children in the 5-14 age group (%)	15.5	20.7	23.5	28.5
2. Mean years of schooling (all workers)	5.4	2.5	1.9	1.2
3. Mean years of schooling (unorganised non-agricultural workers)	6.1	3.7	2.9	2.0
4. Share of all workers Up to Primary Education (including illiterates, %)	55.6	80.7	85.0	90.7

Source: NCEUS, 2007, Table 5.1

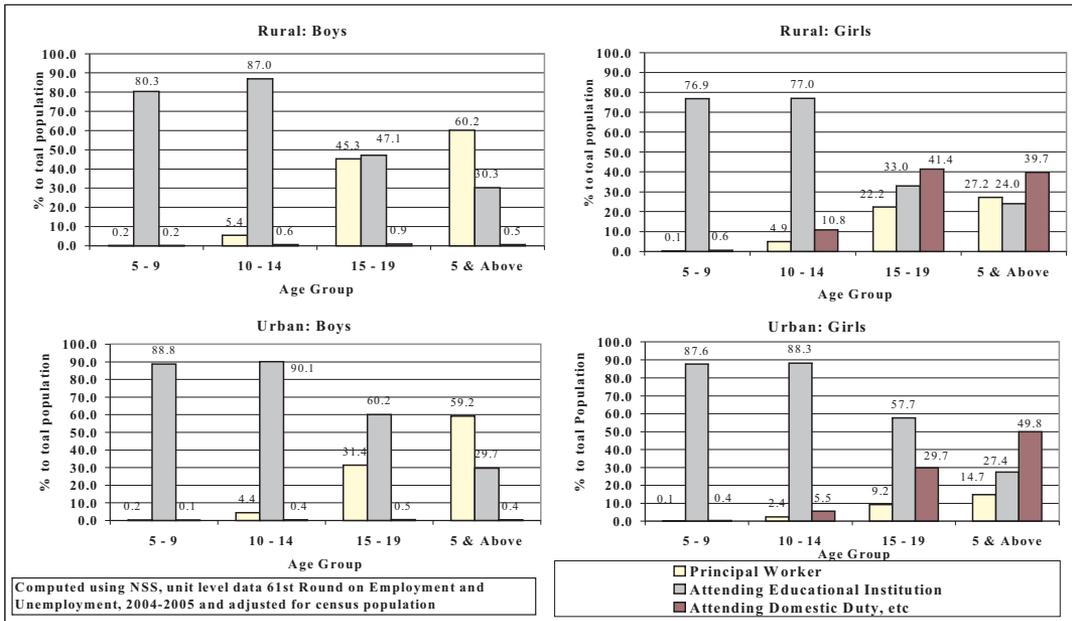
Using the capabilities approach we look for 'conversion factors' or variables and measures for the motivation behind two questions: (a) why poor school attendance?; and (b) why poor educational attainments?

5.1. Why poor school attendance?

School infrastructure: While most large villages in India have a primary school, there are many biases in the development of infrastructure mediated through social groups, which are much more difficult to first identify and then to measure. The Sachar Committee set up by the Government of India to study the social, economic and educational status of Muslims had certain special tabulations done for the Population Census of 2001 to study the availability of infrastructure to the Muslim population. They divided the villages into those with share of Muslim population less than 10, 10-39 and more than 40 percent and also by the size of villages. It was found that there was little bias in availability of primary schools in large villages, but as the size of the village became smaller it was seen that systematically the availability of a school in the village with a share of more than 10 and 40 percent of Muslims went down drastically (Sachar Committee Report, 2006, Chapter 7). This would have a clear impact on the choice of children going to school, especially girl children. Parents would hesitate to send young girls to a school at a distance from the village and this is a gross curtailment of freedom of persons belonging to this community. The Sachar Committee Report further showed that the availability of roads leading to the village also declined as the village size declined and the share of Muslim population increased. Lack of infrastructure restricts the freedom of choice of parents to send their children to school and acts as a negative 'conversion factor'.

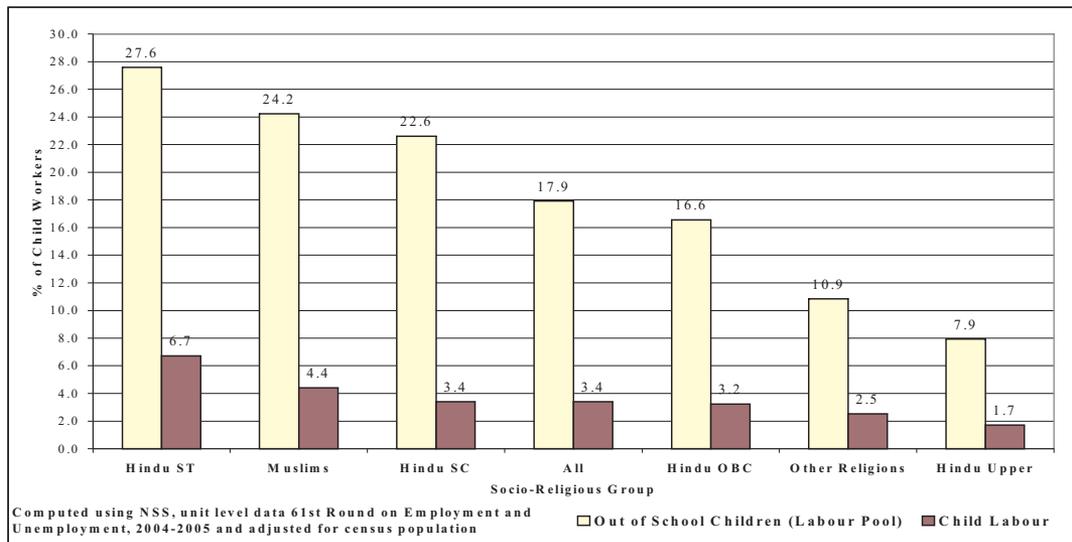
Domestic work and child labour: It is well known that young girls are engaged in helping their households with domestic duties and the care of siblings. In 2004-05, while nearly 40 (10.8) and 50 (5.5) percent of girls in rural and urban areas respectively in the age group of 5 to 19 years (10 to 14 years) were engaged in domestic duties as their major activity hardly any boys were so engaged (Figure 1). This definitely curtailed the freedom of girls to attend school. The boys, more than 50 percent, if not attending school, were more likely engaged in economic activities compared to girls (27 and 15 percent in urban and rural areas) in age-groups 5-19 years (NCEUS, 2007).

Figure 1: Share of Boys and Girls in Principal Work, Attending Education and Domestic Duties (Usual Principal Status) by Age Group, Location and Gender, 2004 – 2005



Source: NCEUS, 2007, Figure 6.3

Figure 2: Incidence of Out of School Children and Child Labour (5 – 14 Years) across Socio-religious Groups, 2004 – 2005



Source: NCEUS, 2007, Figure 6.2

Girls and boys from tribal households and Muslim and scheduled caste households were most likely to be out of school, only partly due to being engaged in economic activity (Figure 2). Being engaged in economic activity and domestic duties are 'conversion factors' that need to be factored into the choice of children's education.

Further, the level of education of the mother also appears to influence this choice. According to the National Health and Fertility Survey in 2005-06, children in the age group of 5-14 years were most likely engaged in paid or unpaid work or household chores for more than 28 hours per week, in households where the mother had no education (NFHS-3, 2007, Table 2.21). As the years of mother's education rose, the percentage of children so engaged declined, with hardly any children working in either kinds of work if the mother than more than 12 years of education. While this does show a link between mother's education and perhaps her agency in getting her children into school, it also partly reflects that children from affluent households do not need to work just as women in such households are most likely to have acquired an education. Further, women from Muslim and scheduled castes and tribe households were least likely to have studied up to standard six.

Using the questionnaire method we conducted surveys of 1236 and 1407 men and women in rural and urban areas in Gujarat in 2000 and again in 2008 in order to gauge the securities and insecurities they faced in the labour market (henceforth referred to as the GIDR surveys, 2000 and 2008). This was modeled on the basis of the ILO Socio-economic security programme (ILO, 2004). In 2008, only about 8 percent of the households with children in the age-group 5-14 years reported any child as working. The proportion was the highest among Muslim households (18 percent), followed by OBC (nearly 11 percent), while it was the lowest, about 5 percent among upper caste Hindu households. When the children were engaged in work nearly 75 percent of the respondents reported that having them to help was important for the business. Nearly half of the child workers did not attend school, and another 20 percent admitted that child work did interfere with the schooling of children. While this is a further measure

¹ The male and female respondents in these surveys were chosen based on stratified random sampling, by the activity status. The areas chosen for study were biased towards low income households since the main theme of the survey was socio-economic security. The urban areas surveyed in both years were Ahmedabad city. The rural areas surveyed in 2000 were in Ahmedabad District while in 2008 it was Surendranagar District. The sampling design for the survey of 2000 is presented in Unni and Rani, 2002.

of how child work can restrict freedom to study and acquire formal education, the relative differences across communities may be reflecting the fact that Muslims and OBC households are more likely to be self-employed rather than in salaried jobs. All the same it helps understand the motivation behind not sending children to school.

Age at birth of first child: The additional burden borne by girls is early marriage and early child bearing. This has a negative effect on the chances of the girls completing school and continuing into higher education. In 2005-06 the age at first birth for women in the age-group of 25-29 was the lowest at 19.1 years for ST, 19.2 for SC, 19.5 for Muslim, 19.9 for all Hindus (including SC/ST), 21.3 for Christians and the highest was 23.7 for Jain women. Teenage pregnancy (women in ages 15-19 years) was 16 percent among tribal women, 15.5 among SC, 12.4 among all Hindus and 11.8 among Muslims (NFHS-3, 2007, Tables 4.10 and 4.11). Here again we see that the institutions of caste and religion bear down on the women in her fertility decisions and curtail her freedom of choice in the sphere of education. Age at marriage and birth of first child are good measures of 'conversion factors'.

Perceptions of parents with regard to children's education: The questionnaire method can be used to obtain information on the perceptions of people with regard to education and also how and when education and the costs involved become a burden on the households. In Gujarat in 2000 we noted that the majority of parents viewed the education of children as a source of security for themselves in the future (GIDR Survey, 2000). When we further queried about what level of education they aspire for their boys and girls if they were attending school, we found a gender difference in the responses. The mean level of education for the boys was graduation or above, while for girl children they only aspired to send them on average up to higher secondary school. There could be a clear cultural reason for these responses, since most parents expected to live with their male children in their old age.

Poor households live from one crisis to another and have to garner resources to be able to stay alive. This has been clearly brought out in the ILO based Socio-economic security surveys in many countries (ILO, 2004, Table 4.5). Some households responded to a financial crisis by pulling their children out of school. In 2008 only about 3 percent of households with children in the age group 5-14 years reported that paying for the costs of children's schooling constituted a financial crisis. However, 4.2 percent

of these households said that they had to pull their children out of school in response to a crisis (GIDR Survey, 2008). In most cases this was due to a serious illness in the household. While the proportion of parents having to resort to this was mercifully small, we noted a gender difference in that girl children were more likely to have to give up schooling. This points to one of the motivations behind poor educational attainment among the poor and particularly among the girls.

On the positive side, however, the interest of parents to keep children in school was also brought out by another 3.3 percent of respondents with children of school going age who reported that they borrowed money or sold personal assets to keep children in school (GIDR Survey, 2008).

5.2. Why poor educational attainments?

The quantity, level and quality of education in the country are in deplorable situation even today. While communities that are lagging behind need to catch up with their education level, we find that they are falling behind further. Besides, children are forced to drop out of school for various reasons and also end up having poor quality educational attainments.

Being left behind: In the era of globalization education and skills are at a premium and this is crucial for communities if they wish to stay ahead. However, we found that the Muslim community was probably getting left behind with lowest reduction in illiteracy and growth of graduates compared to other communities in recent years. While the SC/ST reduced illiteracy by 6.9 percentage points and other backward castes by 6.5, the Muslims were able to reduce illiteracy only by 4.8 percentage points during 1999-2000 to 2004-05. Further, the SC/ST and Muslims hardly increased above graduate education (0.3 percent), while other backward castes and the forward communities did so by 1 and 2 percentage points respectively during 1999-2000 to 2004-05 (Sengupta, et. al., 2008).

Dropout rates: Another feature that indicates the lack of freedom of choice among children to attend school and the low educational attainments is the drop out rates. While there are a number of studies estimating the actual drop-out rates, repetition rates etc. (Mehta, 2007) using various secondary and primary sources of data, there are fewer efforts to understand the causes for such poor performance at the primary level.

It is well-known that girls tend to drop out of school after attaining puberty. However, the drop out rate is also mediated through the institutions of caste and religion. The status of children not attending school is of two kinds, those who never attended school and those who did and dropped out. Nearly 25 percent of Muslim children in 2004-05 were either never enrolled in school or have dropped out, this was followed by nearly 20 percent of children from SC/ST households (Sachar Committee Report, 2006, Figure 4.8). Less than 5 percent of children from upper caste Hindu household suffered this fate.

While quizzed about the main reasons for not attending school or dropping out among children in the age-group 6-17 years, 36 percent of the boys and 21 percent of the girls said they were not interested in studies. It is difficult to interpret the reasons for lack of interest, but it could reflect low quality education due to which children were unable to cope with the rigours of the educational system or that they did not see improved prospects of obtaining employment through acquiring such low quality education. The next major reason given was that it cost too much (18 percent). Further, while 15 percent of the girls said that they were required for household work, 7 percent of the boys said they were required for work on the family farm or enterprise (NFHS-3, 2007, Table 2.10). Thus, economic compulsion in terms of either lack of funds or need to supplement incomes, or just the perception that it did not improve job prospects also act as barriers to acquisition of education. Poor educational attainment due to early drop out from the educational system needs to be understood in terms of the reasons noted above.

Poor reading skills: There is a large literature on the poor quality of education imparted in schools. This further dampens the enthusiasm among poor households to send their children to school, since such education would not provide the children with jobs. The Annual Status of Education Report (ASER, 2007) based on survey conducted by Pratham on an annual basis come out with startling results. The ASER survey found that 38.4 percent of children in Standard I could not recognize letters in 2006, but this dropped to 31.9 percent in 2007. Thus while India's enrolments rates in primary school are close to 90 percent, the learning achievements are a major cause for concern, though they are improving slowly.

The NFHS-3 (2007) data showed that ability to read varied by the social groups and gender. In the age-group 15-49 years, the scheduled tribes fared the worst with 44

percent of men and 25 percent of women having completed Standard VI, not being able to read. Of the rest nearly 40 percent of men and 66 percent of women could not read at all. The scheduled castes were slightly better off with 58 and 34 percent of men and women having completed Standard VI and of the rest 27 percent men and 56 percent women not able to read at all. The next worst group was the Muslims, with just slightly lower percentage of those who could not read at all.

Poor access to media and reading newspapers: The capabilities approach also helps to understand the nature of the intrinsic good of education by distinguishing those aspects that are linked to achieved functionings, for example the value of considering a range of different viewpoints from newspapers, television and radio (Unterhalter, 2003).

Given the poor reading skills noted above, we do not expect much exposure to newspapers among the adults in the age-group 15-49 years. In 2005-06, about 29 percent of ST, 45 percent of SC and Muslim and 54 percent of all Hindu men reported reading the newspaper or magazines at least once a week, while only 10, 15, 18 and 23 percent of women respectively in these social groups read at least once a week (NFHS-3, 2007). Among other media such as television, radio and cinema, it was exposure to television that was the highest in India. About 39 and 30 percent of ST men and women, 59 and 51 percent of SC, 57 and 45 percent of Muslim, and 54 and 56 percent of all Hindu men and women watched the television at least once a week. It is interesting that there is much less gender differential in the viewing of television than in reading of newspapers since it did not require any particular skills. However, even here the gender differentials exists and is particularly high among Muslims. Other religious groups particularly the Jains, Sikhs and Christians were much better off in their exposure to reading and viewing media. Besides getting exposure, reading the newspapers and viewing television can be considered as empowerment of women and can be used as measures of the 'conversion factor', that might impact on choice of education.

Role of governments: As an issue to further social justice the GIDR survey (2008) enquired what the government should do to help those who cannot meet their basic needs. While the majority of the respondents felt that the government should provide jobs, nearly 20 percent of the men and 14 percent of the women respondents thought

the government should do something to help meet the basic needs of education of children. The suggestions given included reducing fees in education, giving bicycles to school going children, and provide high school and degree colleges in the village or urban block. The government already has a programme of giving bicycles to the girl students in Gujarat and this was perhaps a demand for universalizing the scheme. Thus there was an awareness and demand for schooling and higher education in the community that was remained unfulfilled.

6. Conclusion

The capabilities approach is considered superior to the utility approach. While the utility approach assess the resources and opportunities to achieve functionings, such as going to school, the capabilities approach assess the motivations and freedom people have to formulate capabilities. It therefore, encourages us to ask a wider range and more probing questions than the utility approach.

The capabilities approach, however, is still in its infancy when it comes to formal measurement and criteria for evaluation of various capabilities. In the case of education, do people have the freedom to choose and what motivates it? The starting point for this paper is that the motivations and freedoms of choice are mediated through institutions of caste and religion. It restricts the freedom, more so of women and makes them place a low value on education. We explore indicators for the motivation behind poor school attendance and poor educational attainments based on the institutional context. We note that poor school infrastructure, domestic work, child labour, early marriage and child birth and perceptions of parents motivated through institutions of caste and religion influence poor attendance of girl children in school. Similarly, caste and religion also motivate poor educational attainments through higher drop out rates, poor reading skills and poor access to media among girls. These explanations for the achieved functionings of schooling by gender help to identify 'conversion factors' not typically addressed in the utility approach. The capabilities approach may have an important public policy role to play as research on the dynamics of capability failure could be used to improve education policy design and, in turn, educational outcomes for girls from disadvantaged caste and religious communities. However, the remedy for poor enrolment and educational attainment of children may not lie in education policy alone, but in a wider set of socio-economic policies.

References

ASER (2007), Annual Status of Education Report, PRATHAM, New Delhi
<http://www.pratham.org/aser07/aser2007.php>

Doraisamy, Malathy (2001), 'Demand for and Access to Schooling in Tamil Nadu', in A. Vaidyanathan and P.R.G. Nair (ed.), *Elementary Schooling in Rural India*, Sage Publications, New Delhi

Doraisamy, Malathy (2007), 'Child Schooling and Child Work', in Abusaleh Sheriff and Maithreyi Krishnaraj (ed.), *State Markets and Inequalities: Human Development in Rural India*, Orient Longman, New Delhi.

ILO (2004), Economic Security for a Better World, ILO Socio-Economic Security Programme, International Labour Organisation, Geneva

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

Kingdon, Geeta G. and John Knight (2003), 'Well-being poverty versus income poverty and capabilities poverty?', CSAE WPS/2003-16, Global Poverty Reduction Group, Centre for the Study of African Economies, University of Oxford, UK

Kingdon, Geeta G. and Nicolas Theopold (2008), 'Do Returns to Education matter to Schooling Participation? Evidence from India', *Education Economics*, 16 (4): 329-350.

Mehta, Arun C (2007), Student Flow at Primary level – An Analysis Based on DISE Data, National University of Educational Planning and Administration, New Delhi

NCEUS (2007), Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector, National Commission for Enterprises in the Unorganised Sector, Government of India.

NFHS-3 (2007), National Family Health Survey, India, Volume I, International Institute of Population Studies, Mumbai.

NSSO (2006), Status of Education and Vocational Training in India, 2004-05, 61st Round, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

Nussbaum, M C (2000), *Women and Human Development: The Capabilities Approach*, Cambridge University Press, Cambridge.

Psacharopoulos, G (1994), Returns to investment in education: A global update, *World Development*, 22(9): 1325-1344.

Sachar Committee Report (2006), Social, Economic and Educational Status of Muslim Community in India, Prime Minister's High Level Committee, Cabinet Secretariat, Government of India.

Sen, Amartya (1983), Poor, relatively speaking, *Oxford Economic Papers*, 35, 153-69.

Sen, Amartya (1987), *Commodities and Capabilities*, Oxford University Press, Delhi.

Sengupta, Arjun, K.P. Kannan and G. Raveendran (2008), 'India's Common People: Who are They, How Many are They and How do They Live?', *Economic and Political Weekly*, 43(11): 49-63.

Unni, Jeemol (1996), 'Returns to Education by Gender among Wage Employees in Urban India', *Journal of Educational Planning and Administration*, April.

Unni, Jeemol (2007), 'Earnings and Education among Social Groups', in A. Sheriff and M. Krishnaraj, *State, Markets and Inequalities: Human Development in Rural India*, Orient Longman, New Delhi

Unni, Jeemol and Uma Rani (2002), 'Insecurities of Informal Workers in Gujarat, India', *SES Papers 30*, International Labour Office, Geneva

Unterhalter, Elaine (2003), 'Education, Capabilities and Social Justice', Background paper prepared for the Education for all Global Meeting Report, 2003-04, *Gender and Education for All: The Leap to Equality, 2004/ED/EFA/MRT/PI/76*, United Nations Educational, Scientific and Cultural Organisation.

THE GIDR WORKING PAPER SERIES (No. 140 onwards)

140. Uma Rani, "Economic Growth, Labour Markets and Gender in Japan", July 2003. Rs. 45.
- 141.* R. Parthasarathy and Jharna Pathak, "The Guiding Visible Hand of Participatory Approaches to Irrigation Management", August 2003. Rs. 30.
- 142.* Keshab Das, "Competition and Response in Small Firm Clusters: Two Cases from Western India", September 2003. Rs. 30.
143. B.L. Kumar, "Target Free Approach for Family Welfare in Gujarat: A Review of Policy and Its Implementation", October 2003. Rs. 40.
144. Amita Shah, "Economic Rationale, Subsidy and Cost Sharing for Watershed Projects: Imperatives for Institutions and Market Development", March 2004. Rs. 35.
145. B.L. Kumar, "Tribal Education in Gujarat: An Evaluation of Educational Incentive Schemes", June 2004. Rs. 45.
- 146*. R. Parthasarathy, "Objects and Accomplishments of Participatory Irrigation Management Programme in India: An Open Pair of Scissors", July 2004. Rs. 40.
147. R. Parthasarathy, "Decentralisation Trajectories with Multiple Institutions: The Case of PIM Programme in India", August 2004. Rs. 30.
148. Amita Shah, "Linking Conservation with Livelihood: Lessons from Management of Gir-Protected Area in Western India", September 2004. Rs. 40.
149. B.L. Kumar, "Primary Health Care in Gujarat: Evidence on Utilization, Mismatches and Wastage", October 2004. Rs. 40.
150. B.L. Kumar, "Schools and Schooling in Tribal Gujarat: The Quality Dimension", November 2004. Rs. 35.
- 151*. N. Lalitha, "A Review of the Pharmaceutical Industry of Canada", December 2004. Rs. 35.
152. Satyajeet Nanda, "Micro Determinants of Human Fertility: Study of Selected Physiological and Behavioural Variables in SC and ST Population", January 2005. Rs. 35.
153. Jaya Prakash Pradhan, "Outward Foreign Direct Investment from India: Recent Trends and Patterns", February 2005. Rs. 35.
154. Puttaswamaiah S., "Drinking Water Supply: Environmental Problems, Causes, Impacts and Remedies – Experiences from Karnataka", March 2005. Rs. 35.
- 155*. Keshab Das and Pritee Sharma, "Potable Water for the Rural Poor in Arid Rajasthan: Traditional Water Harvesting as an Option", March 2005. Rs. 30.

156. Jaya Prakash Pradhan and Vinoj Abraham, "Attracting Export-Oriented FDI: Can India Win the Race?", April 2005. Rs. 30.
157. Jaya Prakash Pradhan and Puttaswamaiah S., "Trends and Patterns of Technology Acquisition in Indian Organized Manufacturing: An Inter-industry Exploration", May 2005. Rs. 50.
- 158*. Keshab Das and Ruchi Gupta, "Management by Participation? Village Institutions and Drinking Water Supply in Gujarat", June 2005. Rs. 30. (OS)
- 159*. Keshab Das, "Industrial Clusters in India: Perspectives and Issues for Research", July 2005. Rs. 30. (OS)
160. Jeemol Unni and Uma Rani, "Home-based Work in India: A Disappearing Continuum of Dependence?", August 2005. Rs. 35. (OS)
161. N. Lalitha, "Essential Drugs in Government Healthcare: Emerging Model of Procurement and Supply", September 2005. Rs. 35. (OS)
- 162*. Puttaswamaiah S., Ian Manns and Amita Shah, "Promoting Sustainable Agriculture: Experiences from India and Canada", October 2005. Rs. 35. (OS)
163. Amalendu Jyotishi, "Transcending Sustainability beyond CBA: Conceptual Insights from Empirical Study on Shifting Cultivation in Orissa", November 2005. Rs. 30. (OS)
164. Sashi Sivramkrishna and Amalendu Jyotishi, "Monopsonistic Exploitation in Contract Farming: Articulating a Strategy for Grower Cooperation", December 2005. Rs. 30. (OS)
165. Keshab Das, "Infrastructure and Growth in a Regional Context: Indian States since the 1980s", December 2005. Rs. 30. (OS)
166. Leela Visaria, Alka Barua and Ramkrishna Mistry, "Medical Abortion: Some Exploratory Findings from Gujarat", January 2006. Rs. 35.
167. Manoj Alagarajan and P.M. Kulkarni, "Trends in Religious Differentials in Fertility, Kerala, India: An Analysis of Birth Interval", February 2006. Rs. 30. (OS)
- 168*. N. Lalitha and Diana Joseph, "Patents and Biopharmaceuticals in India: Emerging Issues, March 2006. Rs. 35.
169. Sashi Sivramkrishna and Amalendu Jyotishi, "Hobbes, Coase and Baliraja: Equity and Equality in Surface Water Distribution", April 2006. Rs. 30.
170. Amita Shah, "Changing Interface Between Agriculture and Livestock: A Study of Livelihood Options under Dry Land Farming Systems in Gujarat", May 2006. Rs. 35.
- 171*. Keshab Das, "Micro and Small Enterprises during Reforms: Policy and Concerns", July 2006. Rs. 25.
- 172*. Keshab Das, "Electricity and Rural Development Linkage", August 2006. Rs. 30.

173. Keshab Das, "Traditional Water Harvesting for Domestic Use: Potential and Relevance of Village Tanks in Gujarat's Desert Region", November 2006. Rs. 30.
- 174*. Samira Guennif and N. Lalitha, "TRIPS Plus Agreements and Issues in Access to Medicines in Developing Countries", May 2007. Rs. 30.
- 175*. N. Lalitha, "Government Intervention and Prices of Medicines: Lessons from Tamil Nadu", July 2007. Rs. 30.
176. Amita Shah and Jignasu Yagnik, "Estimates of BPL-households in Rural Gujarat: Measurement, Spatial Pattern and Policy Imperatives", August 2007. Rs. 35.
- 177*. P.K. Viswanathan, "Critical Issues Facing China's Rubber Industry in the Era of Economic Integration: An Analysis in Retrospect and Prospect", September 2007. Rs. 35.
178. Rudra Narayan Mishra, "Nutritional Deprivation among Indian Pre-school Children: Does Rural-Urban Disparity Matter?", October 2007. Rs. 35.
179. Amita Shah, "Patterns, Processes of Reproduction, and Policy Imperatives for Poverty in Remote Rural Areas: A Case Study of Southern Orissa in India", November 2007. Rs. 40.
- 180*. N. Lalitha and Samira Guennif, "A Status Paper on the Pharmaceutical Industry in France", December 2007. Rs. 30.
181. Keshab Das, "Micro, Small and Medium Enterprises in India: Unfair Fare", January 2008. Rs. 40.
182. Bharat Ramaswami, Carl E Pray and N. Lalitha, "The Limits of Intellectual Property Rights: Lessons from the spread of Illegal Transgenic Cotton Seeds in India", February 2008. Rs. 45.
183. Keshab Das, "Drinking Water and Sanitation in Rural Madhya Pradesh: Recent Initiatives and Issues", April 2008. Rs. 40.
184. N. Lalitha, "Doha Declaration and Hurdles in access to Medicines", June 2008. Rs. 40.
- 185*. Keshab Das and Aswini Kumar Mishra, "Ensuring Horizontal Equity: Challenges before the 13th Finance Commission", July 2008. Rs. 30.

About GIDR

The Gujarat Institute of Development Research (GIDR), established in 1970, is a premier social science research institute recognised and supported by the Indian Council of Social Science Research (ICSSR), New Delhi and the Government of Gujarat.

The major areas of research at the institute include:

- **Natural Resources Development and Management**
- **Poverty, Employment and Human Development**
- **Industry, Trade and Infrastructure**

In Natural Resources Development and Management, the studies relate to agriculture, irrigation, watershed, forestry and common property resources. The research on Poverty, Employment and Human Development focuses on demography, labour, migration, informal sector, nutrition and health, gender relations, drinking water, poverty issues that related to disparities in quality of life, education and social sector, livelihood and social security issues. The focus of research related to Industry, Trade and Infrastructure relates to various dimensions of small enterprises development, industrial clusters, WTO, intellectual property rights, agricultural trade, and rural and urban infrastructure.

Being integral as they are to the above themes, research often focuses on aspects *of Policies, Institutions and Governance*. The institute also undertakes collaborative research and has a network with NGOs, international organisations, governments, and academic institutions.



Gota, Ahmedabad - 380 060. Gujarat, India
Tel: 91-2717-232623/366/368
Fax: 91-2717-242365
Email: gidr@gidr.ac.in
Website: www.gidr.ac.in