The Educational Status of the Ultra poor

Shantana R. Halder

December 2000

BRAC

Research and Evaluation Division
75 Mohakhali C/A, Dhaka 1212 Bangladesh
Email: bracamr@bdmail.net; Fax: 880-2-8823542,
Phone:880-2-8824140, Ext. 2710

Abstract

This report describes the state of education of the ultra poor by considering four indicators namely: net enrollment rate of children between 6-10 years of age, adult and household literacy rates, educational status of the household heads and the rate of "educationally dark" or "enlightened" households. Net enrollment rate was 55%, while the rural national average was 77%. The rate was highly correlated with amount of land, quality of housing, sex, occupation and literacy status of the household heads, household asset base and saving. Increase in income enhances girls' enrollment more positively. About 51% of the households were educationally dark, where none of the family members had completed at least one year of education. The number of educationally dark households was proportionately higher among the landless, femaleheaded households and also among the destitutes. No direct relationship between this variable with household income was observed. Household literacy rate was 28%. It was about twice higher for male than female. Among the female-headed households, male literacy rate was more than four times higher compared to the female literacy rate. Similar trend was also observed for the destitutes and the most well-off. Land was found to be positively correlated with household literacy.

Introduction

Educational attainment is an integral part of any development strategy. It is closely associated with improved standards of living. The contribution of education to consumption has been found to be very high (World Bank, 1998). Educated mothers are better managers of their households. With household wealth parents' education is one of the important determinants of school attendance and completion, particularly for girls¹. The constitution of Bangladesh guarantees equal right in education to all its citizens irrespective of their sex, caste and class. In recent years the Government of Bangladesh has given greater emphasis to female education of both primary and secondary levels which have had some positive impact on general education. Despite these achievements access to education remains a problem for the ultra poor. Despite these achievements access to primary education remains a problem for the poorest. Educational attainment of Bangladeshi women remains one of the lowest in the world. According to Bangladesh Bureau of Statistics in the literacy rate for females over the age of five years was 20%, compared with 31% for males (BBS, 1996).

This report describes the state of education of the ultra poor. Data used in this report were collected in December 1998 from 1,250 ultra poor households residing in five districts under 25 BRAC's RDP Area Offices. These are the households who were eligible for NGO membership but not participated in the NGO activities. In sample selection the list of all ultra poor households living in the villages of all RDP working areas but not participating in NGO activities prepared by RDP local staff in 1997 was used. The five districts selected for this study were Comilla, Jamalpur, Faridpur, Rangpur and Bogra where concentrations of the non-participating ultra poor

¹ Mercy Tembon and Samer Al-Samarrai in their study on family-level determinants of schooling for boys and girls in Guinea found that parents' education and household wealth are two important determinants of school attendance and completion, particularly for girls. Mothers' formal education is found to be a significant determinant of girls' school attendance, increasing the probability of attendance by 18 per cent. In contrast, fathers' formal education has no significant effect on children's schooling (Mercy Tembon and Samer Al-Samarrai, 'Who gets primary schooling a n d why? Evidence of gender ineualities within Families in Guinea', Ids working paper #85.

households were highest. From each selected region five Area Offices (AOs) were sampled based on the higher frequency of non-participating households.

For analysis the following indicators have been considered: net enrollment rate of children between 6-10 years of age, adult and household literacy rates, educational status of the household heads and the rates of "educationally dark" and "enlightened" households. A person is treated as literate if he or she has completed at least one year of schooling. The net enrollment rate refers to the percentage of children within a certain age group, currently enrolled in any type of educational institution, among all children of that age group. A household is treated as 'educationally dark' if none of its members aged seven years and above have completed one year of education from any educational institution. Data used for this analysis were collected, based on the verbal answers of the informants.

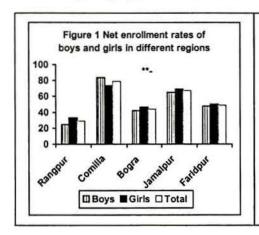
Net enrollment rate of school going children aged 6-10 years

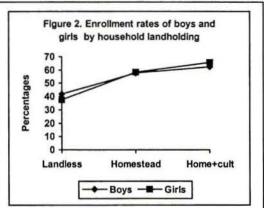
Only 45% of the households were found to have children between 6-10 years of age, the eligible age to attend primary school. On average, an eligible household had 1.39 children of school-going age. Fifty-five percent of them were enrolled in primary schools which is fer below the national enrollment rate. The rate was similar for boys and girls. The national figure for enrollment is 82% with 85% for boys and 77% for girls (BBS, 2000).

The enrollment rates for both boys and girls were highest in Comilla and lowest in Rangpur region. In Comilla the average enrollment rate was 79% whereas in Rangpur it was only 29%. The second highest rate was in Jamalpur (Figure 1).

Household landholding as a function of rural income contributed significantly to school enrollment. As shown in Figure .2, enrollment rates increase with increasing

landholding status. Maximum rates of enrollment were observed for the highest landholding category, and lowest rates for the landless.





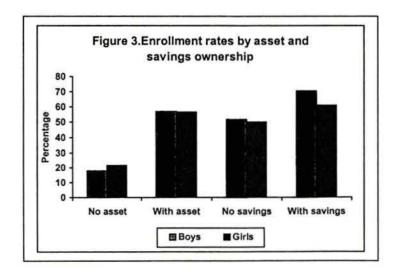
Being a decision-maker, sex of the household head might exert some influence on enrollment. The enrollment rates were found to be relatively higher by 5% for boys and 10% for girls among the male-headed households compared to the female-headed households. Within male-headed households, practically no gender variations were observed. For the female-headed households, enrollment of boys was nearly five percent higher than that of girls. These differences were significant at 10% level.

The enrollment rates were also significantly higher among households headed by literate heads compared to the illiterate ones. This implies that the literate household heads irrespective of educational level are more aware of the fruits of education, that influenced them to send their children to schools. Among different income earner groups, the highest enrollment rate of boys and lowest rate of girls were observed for households depending only on female income. On the other hand, girls' enrollment was highest for those depending only on male income. The enrollment rate of boys was also relatively higher for male only income group These results indicate that in households where males are the primary decision-makers (defined by their bargaining

power) equal importance is given to child education irrespective of their sex. The households depending only on female income, by contrast, were more interested in male education. This may be because the patriarchal norms and values of rural society restrict women's mobility and their participation in any income-generating activities. It is expected that their sons by receiving education will earn more and thereby ensure their future lives.

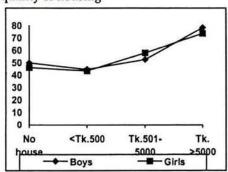
The enrollment rates were lowest among beggars and disabled, who were the most vulnerable and economically least well-off. Second lowest rates of enrollment were typical among the wage employment group. The rates were higher among self and other occupational groups. Although boys' enrollment was lower for most destitutes it was not significantly different among other groups. In the case of girls' enrollment, results were found to be directly correlated with household well-being (Table 1).

Household asset base, savings and living condition are also the variables which may have some influence on enrollment. Enrollment rates were found to be significantly higher for households owning any kind of assets. Among the assetless, girls' enrollment rate was higher than boys, but no gender variation was observed for the asset owning group (Figure 3). Although enrollment rates were relatively higher among those having any kind of savings, the latter was found to be one of the significant correlating factors for boy's enrollments.

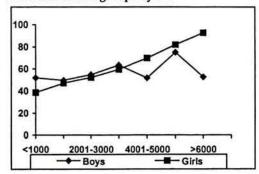


Quality of living houses, measured by their current value, was found to be one of the most significant factors for both boy's and girl's enrollment rates. Figure 4 shows an upward trend of the rates with increasing house value. Decomposition of enrollment rates among different income groups does not show any direct relationship between boys' enrollment and income. On the other hand, a positive relationship between girls' enrollment and income was observed. (Figure 5).

Figure 4. Extent of enrollment rates by the Figure 5. The extent of net enrollment rates of quality of housing



different income groups by sex



Household educational status

The educational status of a household is measured by the percentage of educationally enlightened households, the literacy status of household members seven and above years of age and the literacy status of adults and head of the household. About foutr-nine percent of the ultra poor households were educationally enlightened. On the other hand nearly 51 were 'educationally dark', meaning that not a single person of seven and above years of age had completed at least one year of education. The percentage of educationally dark households was highest among the landless (67%). This figure reduced sharply with increasing household landholding (Figure 6).

The number of educationally dark households was significantly higher among the female-headed households compared to that of the males. It was 73% for households with only female income earners. This percentage was 39.6% and 45.4% respectively for households with only male and male-female both income earners. The highest prevalence of 'educationally dark' households was among the destitutes, those without any living houses or without any other assets and savings (Tables 2 and 3).

Although variation among the percentages of educationally dark households for different income groups was found significant at 5% level, no direct relationship between them was observed. This implies that education is not the only contributing factor in income variation.

Figure 6. The extent of educationally dark households among different landholding groups

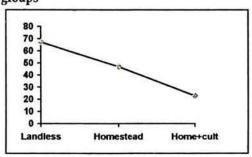
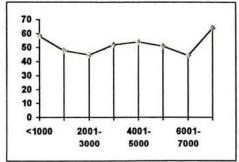


Figure 7. The extent of educationally dark households among different income groups



Redistribution of results among different geographical regions show that Comilla is the educationally most enlightened area, where only one-fourth of the ultra poor were educationally dark. The Rangpur region was in the worst position among the samples where two-thirds of the ultra poor were educationally dark. In rest of the areas this proportion was around fifty (Figure 8).

Household literacy

The literacy rate for all population aged seven years and above was calculated at 31.2% and 18.5% for males and females respectively. Although female literacy rates were found to be significantly lower than the males for all landholding groups, trend of increase in the household literacy rates was observed with the increase in the household landholding.

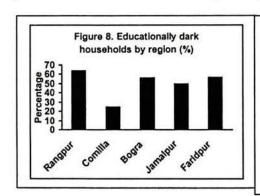
Literacy rates of male were higher for all households, irrespective of the sex of the household heads. But the gap between male and female rates was significantly higher for the female-headed households. In the case of female-headed households, male literacy rate was found to be four and a half times higher than female literacy rates. The rates were also significantly higher for households headed by literate heads irrespective of their sex.

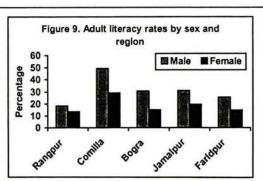
The highest gender variations in the literacy rates of males and females were found among households depending only on female income, and the lowest among those depending only on males. Results of different occupational groups show higher rates in favour of male among the destitutes (among beggars and disabled) and the most well-off ('other occupational group'). For the latter group, the absolute value was higher (Table 5).

Household literacy rates for both male and female were found highest in Comilla followed by Jamalpur, Bogra and Faridpur regions. Lowest rates were in Rangpur (Figure 9).

Adult literacy

Around seventy percent of the households were found with adult males aged 16 years and above and only two households were found without any females of similar age group. In these households 18.7% of male and 8.6% of female adults were found literate. Like household literacy, adult literacy rates were found to be significantly higher for the highest landholding group, the male-headed households, households headed by literate heads, households for 'male only' income earner group and the 'other' occupational group (Table 6). The rates were also significantly higher among households with any kind of assets, savings and among households with better quality housing. Variations in mean between households with and without asset were more prominent in case of female literacy rates. (Table 7).





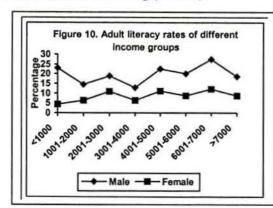
The positive contribution of education to income is pointed out in many works (see World Bank, 1998,). Results presented in figure 4.10 do not show any direct relationship between per capita income and adult literacy. It is important to mention here that half of the literates did not complete the five year primary education and

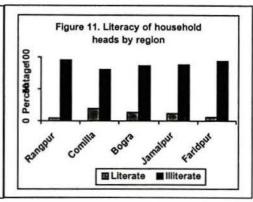
almost all of them did not complete secondary education. This implies that it is not literacy only but years of schooling that is important in changing income (Figure 10).

Education of the household heads

Typically, the household head is the main income earner who has been given the major decision making power of the respective household. Since education is one of the functions of income and contribution of the household head to total income of the respective household is large, it is worthwhile to look into the educational status of the household heads. Only 10.8% of the heads were found literate, 14.5% and 3.9% respectively for male and female heads. Half of the literate male heads did not complete the total five years of primary education. In the case of female headed households this proportion was nearly 70% (Table 9)

Households with literate heads were proportionately highest in Comilla and lowest in Rangpur. In Comilla, the rate was 20%, nearly five times higher than the rate in Rangpur. The next lowest performing region was Faridpur, followed by Jamalpur (Figure 11). Like other indicators relating to education, household heads' literacy differs significantly with their occupation, household landholding and other indicators of household well-being (Table 9).





Discussions and conclusions

This chapter analyses the state of education of the ultra poor households. In this analysis four indicators namely net enrollment rates of children 6-10 years of age, adult and household literacy rates, educational status of the household heads and the rates of educationally dark and enlightened households have been considered. Net enrollment rate was found to be only 55%, while the rural national average was 79% (BBS, 2000). The rates were highest in Comilla (79%) and lowest in Rangpur (29%). The rates were largely correlated with amount of land, quality of housing, sex, occupation and literacy status of the household heads, household asset base and saving. Increase in income enhances girls' enrollment more positively.

About 51% of the households were educationally dark, where none of the family members had completed at least one year of education. Three-fourth of the households in Comilla were educationally enlightened, while in Rangpur about 64% of the households were educationally dark. The number of educationally dark households was proportionately higher among the landless, among female-headed households and also among the destitute. No direct relationship between this variable with household income was observed.

While adult literacy rates for total rural population was 51% (BBS, 2000), it was only 12% for the ultra poor. The literacy rates of the household heads were even lower than the adult literacy rates. Only half of the literate adults and less than half of the literate heads completed the five-year primary education and a fewer completed the secondary education.

Significant regional variations were observed irrespective of the variables considered in the analysis of the educational attainment of the ultra poor households. Comilla stands in the first position and Rangpur in the last. Explanations for higher performance of the Comilla region would be many. Firstly, Comilla is a high vibrant area. It is close to Dhaka city. Secondly, the socio-economic conditions of the ultra poor living in Comilla were better than the ultra poor in the rest of the country which has been discussed in the previous chapter. Thirdly, Comilla is the region where Akhter Hamid Khan, as a pioneer in Bangladesh, started testing an integrated model of rural development with education as one of the components. Finally, Comilla is known historically as a region with rich culture and education. All of these might have had some multiplier effect on the results. On the other hand, the ultra poor in Rangpur region are highly vulnerable. Their poor asset base and higher under-employment influenced their low performance.

To reduce gap among regions, priority should be given to the low profile area. For sustainable development of different regions, different intervention approaches and programmes should be followed to fulfil their specific needs.

Education of household heads and their spouses were found to be highly correlated with income poverty. It was also found that parents' education significantly contributed to children's enrollment and attendance. Women's education reduces maternal and child mortality and controls communicable diseases (Khandker S.R., 1996.; Ravallion, M. and Q. Wodon. 1997). To raise household income and children enrollment adult education programme may be effective. To raise enrollment of the children, the BRAC's type of Non-formal primary education or Food for Education type of programmes may also contribute to some extent.

References

BBS (2000), Statistical Pocketbook 1999 Bangladesh Bureau of Statistics, Dhaka

BBS (1996), Report of the Poverty Monitoring Survey 1995, Bangladesh Buareau of Statistics, November 1996, p. 50

Khandker S.R., 1996. "Education achievements and school efficiency in rural Bangladesh, WB Discussion paper 319, Washington, D.C;

Mercy Tembon and Samer Al-Samarrai, 'Who gets primary schooling a n d why? Evidence of gender ineualities within Families in Guinea', Ids working paper # 85.

Ravallion, M. and Q. Wodon. (1997), "Evaluating targeted social program when placement is decentralized, WB, Washington, D.

World Bank (1998), Bangladesh: From Counting the Poor to Making the Poor Count, Poverty Reduction and Economic Management Network, South Asia Region, Washington D.C.: World Bank

Table 1. Girls and boys' enrollment rate by different poverty indictors

Indicators	Net enrolment rates of children 6-10 years of age			
3	Boys n = 356	Girls n=325	Total n=566	
Average for all	55.1	55.0	55.1	
B. Sex of the hh head				
Male	56.3	57.3	56.8	
Female	51.2	46.5	50.2	
Significance level	ns	p < .0.10		
C. Education of the hh head		-		
Illiterate	51.6	52.6	52.1	
Literate	80.2	75.5	77.9	
Significance level	p<.01	p<.05	p<.05	
D. Sex of income earners	2	-	187	
Households with only female	57.3	43.4	50.4	
Households with male &	51.6	55.4	54.3	
female				
Household with only male	56.1	58.0	57.1	
Significance level	ns	ns	ns	
E. Occupation of the hh head				
Wage	52.1	53.4	52.8	
Self	63.1	62.3	62.7	
Begging/disables/old age	42.9	23.8	33.7	
Else	64.5	74.0	70.8	
Significance level	ns	p<.01	p<.01	

Table 4.2. The extent of educationally dark households by different household indicators

	Absolute landless	Only homestead	Homestead +cultivable	Significance level
% of educationally dark	67.3	46.9	22.7	p<.01
	HHs with only female	HHs with male & female	HHs with only male	-
% of educationally dark	72.8	45.3	39.2	p<.01
	Wage	Self	Begging/dis able/old age	Else
% of educationally dark	48.9	41.7	77.7	34.6
	Male	Female		
% of educationally dark	41.4	66.3		

Table 4.3. The extent of educationally dark households by their asset and savings base (%)

	HHs without asset	HHs wi		without rings	HHs with savings
Educationally dark	83.5	47.0	5	1.8	43.3
Table 4.4. The exte	nt of education	onally dark	households l	by the qualit	y of housin
		(%)	nousenoids i	by the qualit	y of housin
	HHs with no living house		HHs with houses 501-5000	HHs with houses	Significand e level

Table 4.5. Households literacy rate of population seven years and above (%)

Indicators	Literacy rate (above 6 years of age)			
-	Male	Female	Total	
	n = 985	n = 1250	n = 1250	
A. Landholding category				
Absolute landless	31.2	18.5	23.8	
Only homestead	20.2	9.8	13.4	
Homestead+cultivable	32.3	20.0	25.6	
Significance level	51.5	35.3	43.5	
B. Sex of the hh head	p<.01	p<.01	p<.01	
Male				
Female	27.3	22.5	27.2	
Significance level	49.3	11.2	17.6	
C. Education of the hh head	p<.01	p < .01	p<.01	
Illiterate				
Literate	22.0	14.7	17.8	
Significance level	94.6	52.0		
D. Sex of income earners	p<.01	p < .01	p<.01	
households with only female	53.7	9.5	14.4	
households with male & female	26.3	18.5	24.4	
household with only male	29.8	23.7	29.0	
Significance level	p<.01	p<.01	p<.01	
E. Occupation of the hh head	_			
Wage	29.0	18.5	23.9	
Self	31.2	23.0	27.9	
Begging/disable/old age	26.2	6.9	10.0	
Others	47.7	26.0	34.9	
Significance level	p<.01	p<.01	p<.01	

Table 4.6. Adult literacy rate aged > 15 years (%)

Indicators	Adult literacy rate aged > 15			
	Male	Female	Total	
	n = 880	n = 1248	n = 1250	
A. Landholding category	18.7	8.6	11.8	
Absolute landless	8.0	3.6	4.4	
Only homestead	19.2	9.1	12.7	
Homestead + cultivable	40.7	22.8	31.2	
Significance level	p<.01	p < .01	p<.01	
B. Sex of the hh head				
Male	17.2	10.3	14.3	
Female	35.5	5.3	7.3	
Significance level	p<.01	p<.01	p<.01	
C. Education of the hh head				
Illiterate	6.2	4.4	4.9	
Literate	96.1	38.9	67.3	
Significance level	96.4	55.6	76.1	
D. Sex of income earners	p<.01	p<.01	p<.01	
households with only female	31.7	4.4	5.3	
households with male &	15.3	5.2	10.0	
female				
household with only male	19.3	12.4	16.3	
Significance level	p<.10	p<.01	p<.01	
E. Occupation of the hh head				
Wage	15.5	7.7	10.7	
Self	17.2	10.7	13.6	
Begging/disable/old age	21.9	3.4	6.3	
Others	37.9	16.1	22.8	
Significance level	p<.01	p<.01	p<.01	

Table 4.7. Differences in adult literacy rate by ownership of assets, savings and houses (%)

Literacy rate	HHs with	out asset	HHs with	asset base	Significano e level
Male	7.1		19	9.2	p<.10
Female	1.9		9.2		p<.01
	HHs with	out savings	HHs wit	th savings	
Male	17.8		2:	2.0	p<.01
Female	8.0		1	1.1	p<.10
	HHs with no living house	HHs with houses < Tk. 500	HHs with houses 501-5000	HHs with houses > 5000	
Male	15.1	11.2	17.9	36.3	p<.01
Female	6.3	6.2	7.8	19.5	p<.01

Table 4.8. Distribution of HHs by sex and educational status of the HH heads

Education category	Male n=811	Female n = 439	Total n = 1,250	Significance level
Illiterate	85.5	96.1	89.2	p<.01
1-4 class	7.3	2.7	5.7	p<.01
Class 5	3.9	0.5	2.7	p<.01
> 5 class	3.3	0.7	2.4	p<.01
Significance level	p<.01	p<.01	p<.01	- 4404.03

Table 4.9. Percentage of literate household heads by sex and other indicators

Indicators	% of literate household heads			
	Male	Female	Total	
	n=811	n = 439	n = 1,250	
A. Landholding category				
Absolute landless	6.5	0.7	3.6	
Only homestead	14.9	4.9	11.7	
Homestead+cultivable	33.3	14.3	29.0	
Significance level	p<.01	p<.05	p<.01	
B. Sex of the income				
earners				
HHs with only female	18.8	3.5	4.2	
HHs with male & female	9.4	5.6	8.4	
HHs with only male	16.1	4.2	15.6	
Significance level	p<.10	ns	p<.01	
C. Occupation of the HH				
head				
Wage	11.9	4.7	9.6	
Self	15.0	10.3	14.3	
Begging/disable/old age	10.9	V(<u>#</u>	3.4	
Others	36.5	4.9	21.0	
Significance level	p<.01	p<.05	p<.01	
D. Ownership of assets	E-	- 54 - 1		
Yes	14.9	4.7		
No	6.3	: 😜		
Significance level	p<.10	p<.10		
E. Ownership of savings				
Yes	18.6	6.1	15.1	
No	13.5	3.5	9.8	
Significance level	p<.10	ns	p<.05	
Ownership of houses	N.			
No house	12.5	0.9	5.9	
1-500	7.8	5.1	6.7	
501-5000	14.6	2.8	11.4	
>5000	27.6	12.1	24.4	
Significance level	p<.10	p<.10	p<.01	