

# Dropping out of School: North South Divide in West Bengal

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November 2014

## Abstract

Using a large household level primary dataset of rural West Bengal we show that there is a north south divide in the pattern of education demand up to the higher secondary level. Generally, northern districts have much lower overall dropout rate (measured by minors aged between 5 to 18 ‘not in school’ among the total population of that age group) than the southern districts, though there are some notable exceptions in this pattern; Bankura and Purulia are among the best in the state. Our preliminary analysis suggests that this pattern is influenced by the land wealth of the household and the district where the household resides. Land holding per se reduces the dropout rate, and this can be regarded as evidence in favour of the so-called ‘Basu-Van luxury axiom’; however, in those districts which are relatively prosperous (and many of these are in the south) the force of the luxury axiom is weakened, and even reversed in one or two districts. Alternative employment opportunities in informal industries or migration prospects counteract the effect of landholding and encourage greater dropout. Parents’ education always favours staying in school. Other factors such as large family size, belonging to a minority community, or living below the official poverty line worsen the dropout problem unsurprisingly.

**Keywords:** Dropout, Luxury axiom, Education

JEL Classifications: I20, I25, O12, O53

**Preliminary version; please do not quote**

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## 1. Introduction

Over the last few decades India has made significant progress on literacy and expansion of primary education. The adult literacy rate improved from 65% 2001 to 74% in 2011 according to the latest census.<sup>1</sup> The literacy among the primary school going age children was about 95% in 2007 (based on the data on enrolment). Primary school completion rate also has substantially improved from 72.4% in 2001 to 85.7% in 2006, with little difference between boys and girls.<sup>2</sup>

Despite the progress, there appears to be a chronic problem at the secondary schooling stage. According to a 2011 report prepared by UNICEF in 2005-06 the school attendance rate for girls was 48% at the secondary schooling stage, a sharp drop from 84% at the primary stage. For boys too the drop was equally large. Their attendance rate was 58.5% at the secondary stage as compared to 85.2 % at the primary stage. More worryingly, the low attendance rate leading to early drop outs from high school has remained stubbornly high over time, in spite of the so-called growth miracle that India has experienced. In 1989 the data on school enrolment showed that from the age group 11-14, 27% of the boys and 55.4% girls were not even enrolled in school.

Where does West Bengal stand? Well the answer is that it is somewhat in the middle (see Table 1). The overall literacy rate (among the aged 7 and above) is 75.9% in 2008. School attendance rate at the primary level is comparable to national average (based on 1991 and 1998 data as furnished by UNICEF (2011). A recent study based on a sample of schools drawn from six districts also confirms that the dropout rate is fairly low (below 10%), though there is considerable variation between districts (Jalan, 2010). In the overall population of West Bengal, according to 2008 data, only 15.3% of males and 10.1% of females have education of 11 or more years. The percentage of males having less than 5 years of schooling is 42.4% and the same for females is 47.5% (UNICEF, 2011). So it is quite likely that there is a significant drop out taking place at the high school stage.

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<sup>1</sup> Through a new adult literacy campaign called “Saakkshar Bharat” India has made 127.58 million persons literate, of which 60% are female (<http://education.nic.in/Elementary/SaaksharBharat.pdf>).

<sup>2</sup> [http://www.unicef.org/india/The\\_Situation\\_of\\_Children\\_in\\_India\\_-\\_A\\_profile\\_20110630\\_.pdf](http://www.unicef.org/india/The_Situation_of_Children_in_India_-_A_profile_20110630_.pdf)

Why do parents withdraw their children from school (in West Bengal or elsewhere), even when schools don't charge any fees? The development literature has considered several reasons.

- (1) *Poor education facilities, poor quality and teacher absenteeism:* A growing volume of research has been documenting how poor schooling infrastructure and teacher absenteeism are discouraging parents to sustain schooling. See for instance Chaudhury et al, 2006. Banerji (1997, 2000) based on her study of Delhi and Mumbai slum children argued that often the conditions of the school and quality of teaching play a bigger role than household's economic circumstances in determining the chance of a child's school completion. Jalan (2010) studied quality of primary schooling and student achievements in West Bengal; also see Pratiche Education Report (2009) for its finding on West Bengal.
- (2) *Low returns to middle years of secondary schooling:* A completely different argument is that the problem lies in the labour market, which tends to reward very little to secondary schooling. This argument is based on the findings of the rate of returns studies, which show that the rate of return to education falls sharply after primary schooling, and then rises back only at the college level (Saha and Sarkar, 1999; Duraisamy, 2002). Therefore, incentive to complete secondary schooling is largely diminished when households are not able to sustain education that long.
- (3) *Child labour:* This is, however, not a cause of drop out, rather it is a consequence. So examination of the causes of child labour is helpful to understand the causes of drop out. Following the pioneering work on Indian child labour by Weiner (1991) and Burra (1995) and the theoretical contributions of Basu and Van (1998) and Basu (1999) there is now a large literature on child labour for India and elsewhere.

Between 20 and 40 million children in India are estimated to be working. In this literature, a considerable amount of research has been devoted to understanding the effect of parental income on child's education. In particular, researchers have examined if the so-called "luxury axiom" of the Basu-Van model works seamlessly. The axiom says that parents

prefer to give more education to their children when their income rises, provided they are able to meet their subsistence consumption. Empirical evidence suggests that the luxury axiom does not work so smoothly, because of various counteracting forces. Bhalotra and Heady (2003) showed that in rural Ghana and Pakistan richer families were giving less education to their children, in apparent violation of the luxury axiom. This point was investigated by Basu et al (2009) with Indian data (from the state of Uttaranchal), and they concluded that due to imperfect land and labour market, parental incomes or household's wealth may initially cause child labour to go up, but then after a point the wealth effect will kick in and child labour will eventually fall. This argument is known as the so-called "inverted U hypothesis" for child labour. It is essentially a reconciliation of the luxury axiom with empirical evidence.<sup>3</sup>

Another observation from the child labor literature is that self-employed parents may employ their own children at their own business, partly to substitute for outside labour and partly to train them. Older age children in such households may drop out earlier than their cohorts from non-self-employed households. Parikh and Sadoulet (2005) and Pal and Saha (2013) have explored this line of argument (see Table 2b). In this paper, we would like to see if we get any evidence for this possibility.

One of our objectives is to see whether in the context of West Bengal the luxury axiom holds. Is the drop out rate lower in land rich families than the land poor families? Does the luxury axiom, if effective, works better in districts that are economically prosperous, or otherwise? What other household characteristics are important for the child's education? Do self-employed households have higher dropout rates? Our aim is to find answers to these questions.

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<sup>3</sup> Although children not in school often end up working, it is nevertheless incorrect to assume that drop outs and child labour are synonymous. Various estimates suggest that the number of children neither in school nor in work is significantly high, and therefore, it is wise to restrict the explanation to one or the other depending on the nature of the data utilized in the study. That said, the insights gained from studying drop outs can be useful in understanding the problem of child labour, and vice versa.

We utilize a very large household level survey conducted in 2005 by Centre for Studies in Social Sciences, Kolkata covering a little above 32, 000 households in the rural areas of West Bengal. The dataset contains fairly detailed household information and how many children of the age group 5 to 18 are in school or not in school (which would be up to Higher Secondary education). We do not have children's age information, so we cannot ascertain their last possible year of schooling. Nor can we tell what their current year of schooling is, if they are continuing in school.

Despite this obvious, and a serious, limitation on data it is possible to see if the household factors are reliable determinants of drop out. In particular, we would like to see if the households that are wealthy in terms of land assets are different to land poor households for their demand for children's education.

Our finding is that the proportion of children 'not in school' is declining in family's landholding.<sup>4</sup> That means the luxury axiom holds. However, the way the luxury axiom holds, varies considerably between districts. Generally, there is a North-South divide. The axiom attains its greater force in North Bengal and is weakened and even reversed in South Bengal. With the exception of Bankura, Purulia and Howrah all Southern districts have very weak effect of landholding on drop out. Among other factors having a family member working away from home increases the rate of drop out. This suggests that while land per se has a wealth effect on the demand for education, economically prosperous districts and even migrant family members present opportunities of early earning, which lead to greater drop out. On the other hand, parental education provides a big boost for children's education.

## **2. The data and descriptive statistics**

The data were collected by the Centre of Studies in Social Sciences by surveying rural areas of 18 (excluding Kolkata) districts of the state of West Bengal covering over 37,000 households. The

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<sup>4</sup> There is some nonlinearity in the relationship between dropout and landholding, and the relationship is somewhat like a U-curve; but the reversal of the negative relationship occurs at such a high level of landholding, that we can ignore it.

survey was conducted in 5% of *Gram Panchayats*<sup>5</sup> (numbering 162) selected from all the 18 districts. From each *Gram Panchyat* 5% of households were chosen. The sample villages as well as households were chosen in such a way that their representative nature were preserved. Detailed information was collected on the socio-economic status of the household, household's assets, children's educational status (whether in school or dropped out of school, and reasons for drop-out) and gender, type of school attending (private or public), parents' occupation, parents' education, gender of the head of the household, and certain village level information regarding local public goods and local governmental and political institutions. See Table 3 for summary statistics.

One major limitation of the data is that the age range of the household members listed as school-age children is 5 to 18 years.<sup>6</sup> It covers the whole range of 12 years of education, which in the state (as in the rest of India) includes 10 years of secondary education and 2 years of higher secondary education, both free of charges in government-run schools. Therefore, our definition of (school age) children does not match the official definition (6-14 years) which considers only elementary education, viz. eight years of education; strictly speaking, they are minors rather than children; but we may use both terms interchangeably. Although we do not have school specific information, we can assume that each village may have one government-run school, and all children going to that school would be commonly affected by the quality of that school.<sup>7</sup>

An account of district wise average dropout rates is provided in Table 4. In terms of the overall dropout rate, Bankura, Nadia and Darjeeling are the best registering only 9% of minors not in school, closely followed by Purulia. The worst performers are Uttar Dinajpur, Bardhaman and Birbhum. Among the dropouts majority are boys. Some of the districts such as Dakshin Dinajpur, North 24 Pargana, Murshidabad, West Medinipore, Nadia and Howrah show as high as 60% dropouts being attributable to boys. Surprisingly, Purulia where the overall dropout is low (10%), is also among the only two districts where girls dominate the boys among the dropouts, Birbhum being the other one. 56% of the dropouts are girls in Purulia; for Birbhum it is 53%.

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<sup>5</sup> Loosely speaking a *Gram Panchayat* is the lowest level of the local level of government.

<sup>6</sup> It is often the case that parents send their children from age five though the official age for school education begins at six.

<sup>7</sup> It is indeed the case that almost all the villages in West Bengal have at least one primary school, but picture of the secondary schools are not so good.

### 3. The econometric model

Our dependent variable is the proportion of minors dropped out per household, which is regressed on a number of household characteristics including parental education, and family's land wealth. Our regression equation is:

$$d_{ij} = \alpha + \beta_1 L_{ij} + \beta_2 (L_{ij} * D_j) + \gamma_1 h_{ij} + \gamma_2 m_i + \sum_{k=1}^n \theta_k x_{ij}^k + \varepsilon_{ij}$$

where  $i$  refers to household and  $j$  refers to district. The dependent variable  $d_{ij}$  is the proportion of children not going to school or the dropout rate of the  $i$ -th household in  $j$ -th district.  $L$  refers to household's landholding, and  $L_{ij} * D_j$  refers to the interaction of land with district dummy. The variable  $h_{ij}$  is the average years of education of the most educated adult male and female members of the household. If the household has an adult member working away from home, it is assigned a dummy  $m_i$ . Besides these key variables of interest, we include an array of covariates covering the household's socio-economic attributes such as caste, BPL status, religion etc. The error term  $\varepsilon_{ij}$  satisfies the standard assumption of normal distribution with mean  $\mu$  and variance  $\sigma_2$ .

### 4. Results

Our preliminary estimates are given in Table 5-6. We begin by consider OLS estimates where the main variables of interest are land, family' highest education level, and a host of controls. Our model 1 in Table 5 shows that the luxury axiom proposed by Basu and Van (1998) holds; larger the landholding of a family, lower the dropout rate.<sup>8</sup> Family's education level, measure by average years of schooling of the most educated male and most educated female members of the household, also reduces the dropout rate. On the other hand, if there is a family member working away from home and remitting money, it works as a pull factor encouraging the minors to drop out. Family size also exerts a negative influence on education. Among the host of controls used are religion, caste, and whether the household is below poverty line. Predictably poor families will experience higher dropout rates, and so will minorities.

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<sup>8</sup>There is a very weak, but significant, nonlinearity noticed, As its size is too small, we omit it from reporting.

We then consider the possibility that past rainfalls might affect current year's education status. For example, if there was a bad crop year in the past, families that were on the brink of poverty might have suffered severe income shock and was compelled to withdraw their children out of school. On the other hand, good rainfall leads to good harvest and children are kept in school. Model 2 in Table 5 shows that rainfalls in the recent past exert a negative effect on dropout, while rainfalls in the distant past, such as 2001 does increase dropout. However, we need to further investigate the implication of the significance of rainfall data to understand what they actually mean.

Next, we introduce interaction between land and district. This is partly to capture land quality variations in districts and also the institutional variations that may be present and such variations my impact upon family's decision to sustain their children's education. In Table 6 we report such estimates first without and with rainfall in columns 2 and 3. The picture is quite revealing. Most districts in the south, some being quite prosperous (such as Bardhaman and Hooghly), show a very weak luxury axiom effect. Bardhaman actually reduces the effect of land to zero, Birbhum, East and West Medinipore substantially weaken it, and Dakshin Dinajpore reverses the luxury axiom effect. In Dakshin Dinajpore land richer families will have greater dropouts. We check the robustness of our results by adding rainfall in Model 4 and then taking land per capita (i.e. dividing land by family size) instead of just land in Model 5, which also provides GMM estimates.

Results are generally robust. Family's education level continues to exert strong positive effect on the sustenance of education (i.e. negative effect on drop out), remittance continues play a damaging role, possibly by creating lure effects especially young males who may see migration offering greater future than staying in school. Land per se helps to experience lower dropouts. But then the district matters. The most prosperous district Bardhaman actually fully reverses the force of the luxury axiom. So does the relatively less prosperous district Birbhum. Though one or two districts change their position in terms of their positive effect on dropout, by and large the districts in the south tend to weaken and even violate the luxury axiom, while districts in the North tend to satisfy it. Thus a north south divide is noticeable



## Conclusion

Our estimates are preliminary and many more regressions need to be run. For example, parental occupation is important in this context. We need to model that. The agricultural family's tenancy status is another issue we cannot ignore. It is also the case that within the same village households may have common shocks arising from going to the same school or participating in the same labour market. We need to run a fixed effect model to address this issue.

Despite these limitations, it appears at this stage that households' decision to sustain their children's schooling is subject to the interplay of various factors. Parental education is a strongly favourable factor, and so is family's wealth such as land. But the way land exerts positive influence on education is obviated by counteracting factors such as alternative income opportunities available in the local labour market or through migration. Southern states present greater such opportunities and therefore they enjoy the dubious distinction of greater dropouts.

## References

Basu, K. (1999): Child Labour: Cause, Consequence and Cure, with Remarks on Labour Standards, **Journal of Economic Literature**, **37**, 1083-1119.

Basu, K. and Van, P. H. (1998): The Economics of Child Labor, **American Economic Review**, **88**, 412-27.

Basu, K., S. Das and B. Dutta (2010): Child labor and household wealth: Theory and empirical evidence of an inverted-U, **Journal of Development Economics**, **91**, 8-14.

Bhalotra, S. and C. Heady (2003): Child farm labor: The wealth paradox, **World Bank Economic Review**, **17**, 197-227.

Centre for Studies in Social Sciences, Calcutta (2006): **SRD Programme: The Design of Purpose Level Indicators and Base Line Measurements in West Bengal.**

The study was sponsored by DFID, Government of UK.

Weiner, Myron (1991): **The child and the state in India: Child labor and education policy in comparative perspective.** Princeton, NJ: Princeton University Press.

Banerji, Rukmini, (1997) Why don't children complete primary school? A case of a low income neighbourhood in Delhi, *Economic and Political Weekly*, vol. XXXII, No. 32, August 9, pp. 2053-2063.

Basu, K. and Van, P. H. (1998): "The Economics of Child Labor." *American Economic Review* 88: 412-27.

Basu, K., Das, S. and Dutta, B. (2009) Child labor and household wealth: Theory and empirical evidence of an inverted-U. *Journal of Development Economics* forthcoming, doi:10.1016/j.jdeveco.2009.91.006.

Bhalotra, S. and Heady, C. (2003) Child farm labor: The wealth paradox. *World Bank Economic Review* 17: 197-227.

Chaudhury, Nazmul, Hammer, Jeffrey, Kremer, Michael, Muralidharan, Karthik and Halsey Rogers, F., (2006), Missing in Action: Teacher and Health Worker Absence in Developing Countries, *Journal of Economic Perspectives*, Winter, v. 20, iss. 1, pp. 91-116

Duraisamy, P. (2002). Changes in returns to education in India, 1983:94: By gender, age cohort and location. *Economics of Education Review* 21, 609-622.

Munshi, Kaivan and Rosenzweig, Mark, 2006, Traditional institutions meet the modern world: Caste, gender, and schooling choice in a globalizing economy, *American Economic Review*, September 2006, pp. 1225-1252.

Saha, B., & Sarkar, S. (1999). Schooling, informal experience and formal sector earnings, a study of Indian workers. *Review of Development Economics* 3(2), 187-199.

Swaminathan, Madhura (1998) Economic growth and persistence of child labour, *World Development*, vol. 26, No. 8, pp. 1513-1528.

## Tables

**Table 1: Education at a glance in West Bengal**

<b>Literacy in the overall population of the state (aged 7 and above)</b>		
Literacy rate (%)	1991	2008
Rural	52.8	72.6
Urban	72.1	84.1
<b>Total</b>	<b>58.5</b>	<b>75.9</b>
<b>Attendance rate among 6 to 10 years old children</b>		
School attendance rate (primary) (%)	1991	1998
Rural boys	44.8	91
Rural girls	37.7	89
Urban boys	64.7	89
Urban girls	59.3	89
Total boys	49.2	91
<b>Total girls</b>	<b>42.4</b>	<b>89</b>
<b>Distribution of in terms of completed years of schooling</b>		
Years of schooling among population (2008)	Male	Female
Not literate	20.1	35.6
Less than 5 years	42.4	47.5
6 to 8 years	25.1	26.7
9 to 10 years	15.9	14.1
11 or more	15.3	10.1

Source: UNICEF 2010

**Table 2a: Inter-state variation in child work participation and school enrolment rates among 5-14 year olds in 2004-05**

All Enrolled	Any work	Rural Enrolled	Any work
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West Bengal	0.97	0.07	0.97	0.09
All	0.98	0.05	0.977	0.07

Source: IHDS2, 2004-05

**Table 2b: Proportion of children working according to parental occupations**

	All India		West Bengal		WB, Assam, Bihar & UP	
	Self-employed	others	Self-employed	Others	Self-employed	others
All 5-14	0.0535	0.0277	0.0659	0.0318	0.1027	0.0470
Rural 5-14	0.0673	0.0412	0.0848	0.0426	0.0907	0.0483
Rural 10-14	0.1121	0.0686	0.1264	0.0653	0.0925	0.0487

Source: IHDS2, 2004-05

**Table 3: Summary statistics of our data**

Number of households		36088
in which the number of households that have children of age 5-18		26906
The total number of minors (age 5-18)		64877 (29.95%)
	Among total minors	
	Boys	53.47%
	Girls	46.53%
The drop-out rate in the minor population (age 5-18)		16.38%
	Drop-out rate among boys	16.91%
	Drop-out rate among girls	15.77%
Among total drop-outs		
	The share of the boys	55.21%
	The share of girls	44.79%
	The share of child workers	

	(boys and girls combined)	14.73%
Percentage of households having no dropout		61.76%
Among the households with drop-out	<p>The percentage of households where all children have dropped out</p> <p>The percentage of households where some but not all dropped out</p>	<p>64.65%</p> <p>35.35%</p>

**Source:** Survey Data, Centre for Studies in Social Sciences, Calcutta, 2005-06, sponsored by DFID; Report No. SRD Programme: Design of purpose-level indicators and base-line measurement in West Bengal Districts

Table 4:

District-wise dropout rate				
District	Dropout rate	Percentage of boys not in school	Percentage of girls not in school	Share of boys in total dropouts
Bankura	0.09	0.08	0.09	0.54
Bardhaman	0.21	0.21	0.22	0.53
Birbhum	0.19	0.16	0.20	0.47
Coochbehar	0.13	0.13	0.13	0.54
D Dinajpur	0.15	0.15	0.14	0.62
Darjeeling	0.09	0.06	0.08	0.54
Hooghly	0.13	0.14	0.14	0.52
Howrah	0.15	0.18	0.14	0.60
Jalpaiguri	0.11	0.11	0.11	0.54
Malda	0.17	0.18	0.16	0.56
Murshidabad	0.14	0.16	0.13	0.59
North 24 Pgs	0.16	0.18	0.13	0.61
Nadia	0.09	0.10	0.08	0.59
W Midnapore	0.15	0.16	0.13	0.61
E Midnapore	0.12	0.11	0.13	0.50
Purulia	0.10	0.08	0.12	0.44
South 24 Pgs	0.17	0.18	0.16	0.57
U Dinajpur	0.23	0.22	0.25	0.50
State average	0.15	0.16	0.14	0.56

Note: Dropout rate= Total number of 5 to 18 minors not in school/ total number of 5 to 18 minors

Percentage of boys (girls) not in school= Total number of boys (girls) 5 to 18 not in school / total number of boy 5 to 18 in the sample

Share of boys in total dropouts = percentage of boys not in school / total number of boys and girls not in school

**Table 5: OLS estimates without district interactions**

Variables	Model 1	Model 2
Land	-0.00024*** (0.00003)	-0.00025*** (0.000037)
Household's education level	-0.34*** (0.001)	-0.35*** (0.001)
Family size	0.047*** (0.0016)	0.047*** (0.0016)
If receiving remittances	0.138*** (0.018)	0.144*** (0.018)
If aware of the Village Education Committee	-0.038*** (0.0113)	-0.036*** (0.0113)
District rainfall 2001		0.0001*** (0.00004)
District rainfall 2002		-0.000065 (0.00004)
District rainfall 2003		-0.0001*** (0.0001)
District rainfall 2004		-0.0001*** (-0.00003)
District rainfall 2005		0.000035* (0.00001)
Intercept	0.44	0.424
Other controls	Yes	Yes
R <sup>2</sup>	0.086	0.089
Adj. R <sup>2</sup>	0.085	0.088
F	203.13	140.54
Obs.	25873	25873
Test of heteroskedasticity	Passed	Passed



**Table 6: OLS and GMM estimates with district interactions**

OLS estimates				GMM estimates with link logit and maximization ML by Newton Raphson	
Variables	Model 3	Model 4		Variables	Model 5
Land	-0.00097*** (0.000095)	-0.0012*** (0.000094)		Land per capita	-0.0191*** (0.00242)
Land*Bardhaman	0.00097*** (0.00012)	0.001*** (0.0001)		Land per capita *Bardhaman	0.0227*** (0.003)
Land*Birbhum	0.00089*** (0.00022)	0.00061*** (0.00019)		Land per capita *Birbhum	0.0244*** (0.004)
Land*Dakshin Dinajpur	0.0052** (0.0026)	0.0074** (0.0037)		Land per capita *Dakshin Dinajpur	
Land*Hooghly	0.00072*** (0.00014)	0.0008*** (0.0001)		Land per capita *Hooghly	0.013*** (0.0032)
Land*Jalpaiguri	0.00027 (0.00022)	0.00089*** (0.00018)		Land per capita *Jalpaiguri	
Land*Malda	0.00055*** (0.00021)	0.001*** (0.0002)		Land per capita *Malda	0.0122*** (0.0061)
Land*North 24 Pargana	0.00072*** (0.00017)	0.00067*** (0.00015)		Land per capita *North 24 Pargana	0.167*** (0.00418)
Land*West Medinipore	0.0006*** (0.0001)	0.00042*** (0.0001)		Land per capita *West Medinipore	0.014*** (0.0029)
Land*East Medinipore	0.00073*** (0.0001)	0.00097*** (0.0001)		Land per capita *East Medinipore	0.00535 (0.0047)
Land*South 24 Pargana	0.00077*** (0.0002)	0.000034 (0.0003)		Land per capita *South 24 Pargana	0.0146*** (0.0036)
Household's education level	-0.34*** (0.001)			Household's education level	-0.0953*** (0.0053)
Family size	0.048*** (0.0016)	0.42*** (0.003)		Family size	

If receiving remittances	0.1367*** (0.018)	0.127*** (0.0224)		If receiving remittances	0.4347*** (0.0489)
If aware of the Village Education Committee	-0.0357*** (0.0113)	-0.0511*** (0.11)		If aware of the Village Education Committee	-0.10474*** (0.0354)
District rainfall 2001		0.00027*** (0.00005)			
District rainfall 2002		-0.000075 (0.00005)			
District rainfall 2003		-0.000192*** (0.00004)			
District rainfall 2004		-0.00011*** (0.00003)			
District rainfall 2005		-0.00001*** (0.000021)			
Intercept	0.447	0.299		Intercept	-0.868
Other controls	Yes	Yes		Other controls	Yes
R <sup>2</sup>	0.09	0.09		AIC	0.7432
Adj. R <sup>2</sup>	0.089	0.089		BIC	-246620.7
F	85.39	85.39		Log pseudolikelihood	-9580.99
Obs.	25873	25873		Obs.	25857
Test of heteroskedasticity	Passed	Passed			

Notes for Table 5 and Table 6: (i) Standard errors are in parenthesis, (ii) \*=significant at 10% level, \*\*=significant at 5% level, \*\*\*=significant at 1% level. (iii) Household's education level = Average of the education level of the most educated male and the most educated female member of the household. (iv) 'If receiving remittances' is a dummy variable which takes the value 1 if a migrant member is sending money home. (v) Other controls: BPL dummy, religion dummy, number of livestock, having electricity connection in the household. (vi) Interaction of Land and other district dummies are not reported as they are not significant. (vii) Land-squared and the square of Land\*District are also included in the regression and they are mostly significant, but they are not reported as the coefficients are very small. (viii) Per capita land is land holding divided by the family size.