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RESEARCH ARTICLE

INTER-STATE DIFFERENCES AND DETERMINANTS OF SCHOOLING AT PRIMARY STAGE IN NORTH-EAST INDIA

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ABSTRACT

The states in the north-eastern region of India show low progress in education sector compared to other states in the country. The study of scenario of education of children using the data from household survey will be instructive in highlighting the challenges in achieving the set targets of universalisation of primary education under SSA. Keeping this in mind, the paper aims to estimate the trends and study the inter-state differences in primary school attendance, enrollment and drop-out rates and to study important 'determinants of school attendance' for the states in the North-East India. Paper uses the data from three rounds of NFHS. Background factors considered for analysis are sex of the household head, sex of the child, religion, caste, type of house, availability of electricity and SLI. The children included for analyses were aged 6-10 years at the time of the interview. The analysis uses the cross tabulation and logistic regression to estimate the effect of predictor variables on educational attainment. Fluctuating trends and interstate variations have been observed in respect of GER, NER, and drop-out rates for children. Sex of the household head, sex of the child, religion, caste, type of household, availability of electricity at household and SLI remain as important determinants of schooling.

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INTRODUCTION

North-Eastern region consists of the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. Development in education sector in the region is not so encouraging in comparison with rest of the country. A growing number of children lacking basic skills in numeracy, writing, reading and problem solving are dropping out of school at different stages. The states in this region are very different in many ways from the other parts of country as for as their developmental needs in the education sector are concerned. According to District Information System for Education (DISE) 2006-2007, the states in northeastern region lag behind compared to other states except for Mizoram and Sikkim. Therefore there is a strong need for analyzing the scenario of primary school attendance in these states in order to deal with the problem in hand. DISE is the official database used for monitoring and evaluation of educational programme. DISE collects information from schools and educational institutions regularly. The data and indicators derived from these sources are used to gauge the capacity and performance of schools in relation to national educational goals and plans. However, they provide relatively limited information on the individual characteristics of pupils (such as age, sex and residence), and little information on the characteristic of their households. On the other hand household surveys provide important education data that can be analysed according to household and individual characteristics.

For instance, enrollment refers to a child's name being 'on the books' i.e., first-day enrollments, while attendance refers to a child's actual presence in a classroom. School records are more likely to give figures on enrollment, while surveys are more likely to measure attendance. Household survey data therefore, can complement the school-based data by providing information on the aspects of children's background that may influence household schooling decisions.

Studies pertaining to participation or non-participation of children in schooling using the data from large scale household surveys such as the national sample survey (NSSO), NFHS, the census, the national council for applied economic research (NCAER) have also provided useful information in this regard. For instance a study by Filmer & Pritchett focused on the effect of household wealth on the probability of children's enrollment (Filmer and Pritchett, 1999), Ramachandran's study focused on the children's need for contributing to the household income (Ramachandran, 2002). A study by Durdhawale, 2004 identified socio-economic factors as important determinants of schooling. No study is done to find the trends in primary schooling taking education-data from large scale household surveys with special reference to the states in the north-eastern region. Keeping this in view, an effort is made to understand the trends in primary schooling by using data from a large scale household survey. For this purpose the National Family Health Survey (NFHS) data is selected. The study of the trends in school participation and grade attainment using the three available data sets NFHS pertaining to years 1993-94, 1998-99 and 2005-06 will be very

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useful as the trends in primary school completion are instructive in highlighting the challenges in achieving the set targets of universalisation of primary education.

Objectives

Following are the major aims and objectives of the study.

1. To estimate the trends and to study the inter-state differences in primary school attendance, enrollment and drop-out rates among the states in North-East India.
2. To study important ‘determents of school attendance’ for the states in the North-East India.

METHODOLOGY

The analysis of data focused on the study of the trends in school participation and grade attainment for children aged between 6 and 10 at the time of interview. Variables considered for analysis are ‘gross enrollment ratio’, ‘net enrollment ratio’ and ‘drop-out rate’. Explanatory variables considered for analysis are sex of the household head, sex of the child, religion, caste, availability of electricity, type of house and standard of living index (SLI). All the states in the region are considered for the analysis. They are Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The analysis uses the cross tabulation and logistic regression to estimate the effect of predictor variables on educational attainment. As stated earlier, the source of data for the study is NFHS, i.e., NFHS I, NFHS II and NFHS III pertaining to years 1993-94, 1998-99 and 2005-06 respectively. The NFHS data on education were chosen as these surveys collect data on both school participation and grade attainment as well as on various other demographic aspects. This allows the exploration of possible associations and to relate the attendance rates to household economic status.

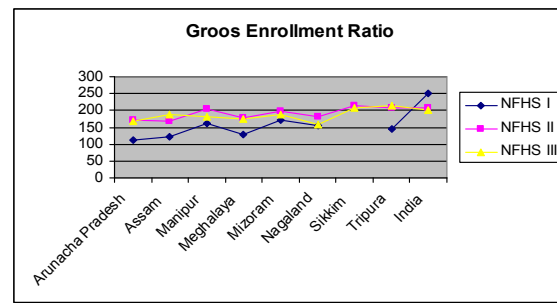


Fig. 1. Gross Enrolment Ratio

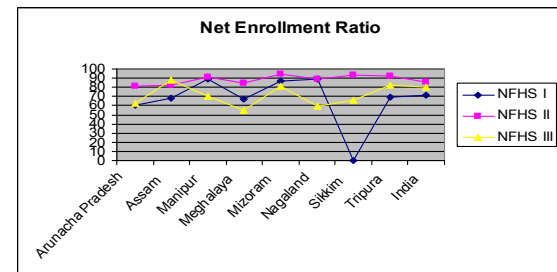


Fig. 2. Net Enrolment Ratio

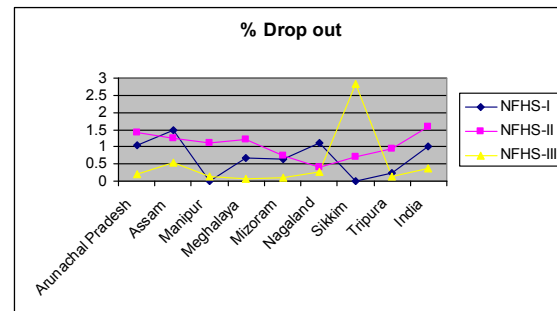


Fig. 3. Percent Drop-Out

Table 1. Interstate difference in primary school participation ratios by states: 6-10 years of age: Gross Enrolment Ratio

States	NFHS I		Gross enrollment ratio NFHS II		NFHS III	
	Ratio	Sample	Ratio	Sample	Ratio	Sample
Arunachal Pradesh	112.49	860	172.23	1055	167.56	982
Assam	122.03	2692	168.15	2346	186.49	1848
Manipur	160.68	894	205.52	1088	180.42	1948
Meghalaya	128.14	891	178.04	906	173.49	1191
Mizoram	172.39	775	196.57	932	188.97	871
Nagaland	154.93	905	182.25	734	159.37	2471
Sikkim	--	Nil	212.74	856	208.11	887
Tripura	144.05	871	206.12	752	213.73	711
India	250.20	66413	206.96	64,086	201.29	61299

RESULTS

Interstate difference in primary school participation:

The Table 1 and Figure 1 as given below show the gross enrollment ratio among the states of the region and also at all India levels during three NFHS rounds. Gross enrollment ratio for all India is low during NFHS III compared to NFHS I and NFHS II. Arunachal Pradesh in NFHS I, Assam in NFHS II

and Nagaland in NFHS III have recorded lowest GER. On the other hand, Mizoram, Sikkim and Tripura have recorded highest GER during NFHS I, II and III periods respectively. The Table 2 and Figure 2 as given below show the net enrollment ratio among the states of the region and also at all India levels during three NFHS rounds. In NER, fluctuations are observed at all India level. Arunachal Pradesh in NFHS I and NFHS II and Meghalaya in NFHS III have recorded

Table 2. Interstate difference in primary school participation ratios by states: 6-10 years of age: Net Enrolment Ratio

States	Net enrollment ratio					
	NFHS I	Sample	NFHS II	Sample	NFHS III	Sample
Arunachal Pradesh	60.58	860	80.95	1055	62.30	982
Assam	67.74	2692	82.81	2346	88.40	1848
Manipur	88.93	894	91.17	1088	69.82	1948
Meghalaya	67.43	891	84.22	906	55.18	1191
Mizoram	87.08	775	94.07	932	81.86	871
Nagaland	88.74	905	89.03	734	59.66	2471
Sikkim	--	nil	93.23	856	65.96	887
Tripura	69.33	871	92.02	752	82.00	711
India	70.98	66413	85.62	64,086	79.91	61299

Table 3. Interstate difference in primary school participation ratios by states: 6-10 years of age: % Drop out

States	% Drop out			Sample		
	NFHS-I	NFHS-II	NFHS-III	NFHS-I	NFHS-II	NFHS-III
Arunachal Pradesh	1.05	1.42	0.20	860	1055	982
Assam	1.49	1.24	0.54	2692	2346	1848
Manipur	0.0	1.10	0.15	894	1088	1948
Meghalaya	0.67	1.21	0.08	891	906	1191
Mizoram	0.65	0.75	0.11	775	932	871
Nagaland	1.10	0.41	0.28	905	734	2471
Sikkim	nil	0.70	2.82	nil	856	887
Tripura	0.23	0.93	0.14	871	752	711
India	1.00	1.57	0.38	66413	64086	61299

Table 4. Determinants of School Attendance in the States (Rural), NFHS-III

Attributes	Determinants of school attendance in some states (Rural), NFHS 3							
	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Sex of HH head	Exp(b)							
Male	1.197	1.187	1.134	0.929	0.719	0.815	1.057	1.592
Female#								
Sex of children								
Male	1.323	0.876	0.996	1.063	0.994	0.903	1.107	0.709
Female#								
Religion								
Hindu	1.105	1.218	0.613	1.414	--	--	0.933	1.078
Muslim	--	3.681	0.161	--	--	--	--	--
Christian	1.037	--	0.462	2.824	2.738	1.127	--	--
Buddhist	--	--	--	--	--	--	1.157	--
Dongopolo	2.847	--	--	--	--	--	--	--
Others#								
Caste								
SC	1.261	1.250	1.152	1.200	--	1.778	1.337	1.834
ST	2.411	0.217	0.674	2.035	--	1.644	1.157	0.696
OBC	1.156	0.856	1.885	--	--	1.351	0.872	1.145
Others#								
Type of House								
Pucca	1.241	1.792	0.450	0.600	1.803	0.539	1.223	0.363
Semi pucca	0.991	1.945	0.401	0.350	1.475	0.456	1.181	0.336
Kuccha#								
Has electricity								
No	1.331	1.241	0.773	0.786	1.321	0.7345	0.877	1.009
Yes#								
SLI								
Low	0.546	0.903	0.902	0.523	0.663	0.541	0.462	0.683
Medium	0.201	0.431	0.516	0.321	0.232	0.285	0.352	0.368
High#								
Sample	586	940	979	713	471	1301	569	523
R Square	0.0808	0.1303	0.0554	0.1072	0.0666	0.0796	0.0308	0.0609

lowest NER. On the other hand, Manipur, Mizoram and Assam have recorded highest NER during NFHS I, II and III periods respectively. The Table 3 and Figure 3 as given below show the percent dropout among the states of the region and also at all India levels during three NFHS rounds. At all India level, the percentage of dropouts have reduced from NFHS I to NFHS III, though there was some fluctuations between NFHS I and NFHS II. Similar trend with regards to drop-out rate is observed among all the states. Highest percent of drop-out is recorded for Assam, Arunachal Pradesh and Sikkim during

three rounds of NFHS. On the other hand, Manipur, Nagaland and Meghalaya have recorded lowest percent of drop-out during respective periods.

Determinants of Educational Attainment

Table 4 as given below predicts those attributes that enhance the chance of going to school for all the states in the region according to NFHS III. The dependent variable is coded as 0 if the child is not going to school (i.e. illiterate and drop outs) and 1 if the child is presently going to school. The important

predictor variables considered for analysis are sex of the household head, sex of the children, religion, caste, type of house, availability of electricity and SLI. The probability of school attendance for children belonging to households having male as the head of the family is significantly higher than children to belonging households having female as the head of the family. For example in Arunachal Pradesh the children belonging to households having male as the head of the family have chances 1.19 times higher than the children belonging to households having female as the head of the family. The similar observations are made across all other states. The probability of school attendance for boys is significantly higher than girls with varying extent across the states. For example, in Meghalaya, the chance for boys to attend school is 1.06 times higher than girls while in Sikkim it is 1.05 times more. Religion is also seems to important predictor variable as the chance for children to attend school is lower among the children belonged to Muslim, Christianity, Buddhist against the Hindu religion. The chance of going to school is less among the ST, SC as well as OBC children against the general caste with varying intensity across states. Staying in Pucca or semi pucca houses increases the chance of attending school in comparison with the kuccha houses in almost all the sample states. Lack of electricity at household level also reduces the chance to go to school as seen in Arunachal Pradesh, Assam and Nagaland. Coming to economic factors as a determinant of school attendance at primary level, SLI is found to be important predictor as being in the low or medium economic class enhances the risk of not attending school in comparison with high SLI group according to NHFS III.

Major Findings and Conclusion:

The major aims of the present analysis are to estimate the trends and to study the inter-state differences in attendance, enrollment and dropout rates and to study the important deterrents of school attendance among the states in north-east India using three rounds of NFHS data sets. Following are the major finding of the present analysis:

1. Fluctuating trends have been observed in respect of GER, NER, and drop-out rates for children in the north-eastern states.
2. Interstate variations have been observed in respect of GER, NER, and drop-out rates for children in the north-eastern states.
3. Sex of the household head, sex of the child, religion, caste, type of household, availability of electricity at household and SLI remain as important determinants of schooling.

Causal educational studies have consistently found home background i.e., socio-economic status to be an important determinant of educational outcomes. Dreeze and Kingdon, 2001, Sipahimalani, 1996, Visaria and Visaria, 1993, Shiva *et al.*, 1992 point out that household wealth significantly enhances enrolment and participation of girls in particular. The absence of adequate resources hampers learning in developing countries through poor nutrition, health, home circumstances (lack of books, lighting or places to do homework) and parental education. It discourages enrolment and survival to higher grades, and also reduces learning in schools, (Servaas van der Berg, 2008). EFA Global Monitoring, 2007 also identified poverty as one of the important factors which limit school attendance and has shown the large gaps in school access between richest and poorest households. The present study also reveals the findings in the lines of such studies which have pointed out to the fact that multiple disadvantages have devastating implications for educational attainment.

REFERENCES

- Durdhawale, Vijaya, 2004. Scenario of Primary School Attendance: A Study of Less Developed States in India, Seminar paper, Master in Population Studies, IIPS, Mumbai.
- Dreeze, Jean and Geeta Kingdon, 2001, School Participation in Rural India. *Review of Development Economics*, Vol 5 No 1.
- Filmer, D and Pritchett, L. 1999. Educational Enrolment and attainment in India-Household, Wealth, Gender, Village and State Effects, *Journal of Educational Planning and Administration*, Vol.3 No.2.
- Ramachandran, V, 2002. Gender and Social Equity. Hierarchies of Access. The European Commission.
- Shiva, R, and Sanjeeva Reddy, P. 1992. Inequality in Educational Opportunity in Rural Area: A Case Study. *Journal of Educational Planning and Administration*, Vol VI No. 3, July.
- Servaas van der Berg, 2008. Poverty and Education, Education Policy Series, IIEP and IAE.
- Sipahimalani, Vandana, 1996, Education in the India Rural Households: A Gender based Perspective, Mimeo, NCAER.
- Visaria, P, Anil Gumber and Leela Visaria, 1993. Literacy and Primary Education in India: 1981-1991 Differentials and determinants. *Journal of Educational Planning and Administration*, Vol 7 No. 1, January.
