

**Impact of Primary Education
Stipend
on
Household & School Level Outcomes in Bangladesh**

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An Overview of the Intervention

- 1993 -Food for Education (FFE)
- 1999- Primary Education Stipend (PES)
- December 2001- both FFE and PES were terminated
- Replaced by Primary Education Stipend Project (PESP)-a single cash-based stipend program for the entire country
- 2008 to 2013-PESP(II), further extending to June, 2015

Basic Features of the Project

- Families covered
- Performance criteria
- A local-level beneficiary selection process: School management committees (SMC) and teachers
- Upazila level: Upazila Education Officer and Upazila Nirbahi Officer
- The stipend amount Tk.100 per month(for 1 student) and Tk.125 (two siblings)
- Objectives- Increase enrollment rate, attendance rate, cycle completion rate, quality of primary education, reduce the dropout rate, ensure equity in the provision of financial assistance, encourage women empowerment

Objectives of the Study

- Assess outcomes of the intervention in terms of major indicators of educational attainment, economic and social development both at HH and school level

In this attempt the study has

- Reviewed the program design, implementation strategy and methodology
- Measured relevance, efficiency, effectiveness, impact and sustainability of the project;
- Assessed the performance of the implementing agency both in head and field offices; and
- Identified and recorded lessons learned from the best practices of the project

Methodology of the Study

- **Sampling:** 25 Districts, 2500 Households (1250 treatment and 1250 control)
- **Study Sites:** 5 qualifying schools/madrasas from each upazila
- From each school/madrasa 10 students were randomly selected as treatment group. Similar number of students were selected for the control groups
- **Data Collection Tools:** A mixed-method approach
 - (i) Surveys of the (a)households (b) heads of the institutions,
 - (ii) Key Informant Interviews (KIIs)

Household Level Impacts

- Given the nature of the data, Propensity Score Matching (PSM) technique was applied

PESP status	Within Common Support	Off Common Support	Total
PESP Households	1,137 (99.9)	1 (0.1)	1,138
Non-PESP Households	1,157 (100.0)	0 (0.0)	1,157

- PESP participation decision is positively affected by electricity connection to the household, occupation of the father, and educational attainment of mother
- Students from better house quality, access to sanitary latrine, more homestead/ agricultural land, high demographic dependency rate, higher per capita household income, high educational attainment of father, and close to school are less likely to get selected for the PESP intervention

Household Level Impacts

Variables	Logit Estimates	Odd Ratios
House Quality Index	-0.369*	0.692*
Household Has Electricity Connection	0.193**	1.213**
Household Has Sanitary Latrine	-0.717***	0.488***
Total Quantity of Land	-0.003***	0.997***
Total Value of Asset	-1.05e-06***	1.000***
Demographic Dependency Rate	-0.018***	0.982***
Log of Per Capita Household Income	-0.151**	0.860**
Occupation of Father	0.193*	1.213**
Education of Father	-0.026	0.974*
Education of Mother	0.051***	1.052***
Time Taken to Reach School (Minute)	-0.015***	0.986***
Constant	2.692***	14.765***
Observations	2,303	
Log Likelihood	-1508.65	
LR $\chi^2_{(9)}$	175.14***	
Pseudo R ²	0.055	

Household Level Impacts

- The PESP households also lag behind in most of the economic wellbeing indicators, such as land and non-land assets and financial assets
- Total annual income of the PESP households is significantly lower
- Significant difference with regard to subjective assessment of food security and poverty

Indicator	Treatment	Control	Difference	S.E.	T-statistic
Food Security Status	2.284	2.531	-0.247	0.032	-7.74***
Poverty Status	1.932	2.195	-0.263	0.027	-9.89***

Impact on Household Expenditures

Item	PESP	Non-PESP	Difference	T-statistic
Weekly Household Expenditures on Food (Tk.)	1,316	1,348	-32	-1.27
Monthly Household Non-food Expenditures (Tk.)	2,282	2,166	116	0.73
Annual Household Expenditures (Tk.)	16,051	16,616	-565	-0.57

- The program failed to make it possible for its beneficiaries to increase their expenditures on food, and non-food items and hence, the PESP does not have a discernible impact on expenditures at the household level

HH Level Impacts

- PESP recipient students attended 11 more school days (204 days of school compared to 193 days)
- While PESP students obtained 60 % marks in the subjects considered, the non-PESP students could manage only 53%

Sample Type	Treatment	Control	Difference	S.E.	T-statistic
Attendance (Days)					
Unmatched	204.297	193.182	11.116	0.883	12.59***
Matched	204.288	192.907	11.382	0.939	12.12***
Performance in Examinations (Grades as Percent)					
Unmatched	0.6003	0.5401	0.0602	0.0087	6.95***
Matched	0.6003	0.5277	0.0726	0.0091	7.99***

- Both categories of students :
 - study about 3 hours daily
 - spent annually about Tk. 2,600 for educational expenses
 - almost half of students study with privately arranged tutors beyond school hours
 - only a few are engaged in income generating activities in addition to study

Impact on Women Empowerment

- Women empowerment is expected to increase with the participation of mothers in the PESP activities
- Women's freedom of mobility from PESP student households have shown slightly better performance
- 20 % of PESP households is self-dependent, while in 15% of the non-PESP households female members are dependent on either husband's or father's choice
- In cases of decision making (matrimony for family members, solving family problems, purchasing land, child's healthcare, food items, or children's education) rate of incidence to take decision by female members are quite low

Impact on Women Empowerment

- PSM impact of PESP on women empowerment reveals that women in households enjoy equal levels of women empowerment irrespective of the PESP status

Variable	Treated	Controls	Difference	S.E.	T-stat
Freedom of Mobility	8.232	8.340	-0.108	0.097	1.110
Household Decision Making	12.257	12.326	-0.070	0.109	0.640
Economic Decision Making	10.597	10.644	-0.048	0.115	0.410
Personal Autonomy	7.723	7.811	-0.088	0.138	0.640
Awareness	5.538	5.553	-0.015	0.054	0.280

Perception of Parents

- “ensure better future for the child” (96%), “compulsion to obtain primary education” (81%) and “financial incentive” (64%)
- 9% parents will not send children to school if financial incentive is not provided
- 17% cannot afford to send children to school without the financial incentive
- For 71% it is a burden to afford the additional cost of schooling
- About 4% admitted to bribe to enlist their child in the beneficiary list
- More than half (53%) of the parents of non-beneficiary students tried to enlist their children in the beneficiary list

School Level Impacts

- **Attendance Rate** is significantly higher for stipend recipient group across grades and genders. Average absenteeism in the year 2014 was less than 10 % for the PESP recipient compared to 30% for the non-PESP students

Grades	Gender	PESP	Non-PESP	Difference	t-statistic
I	Boy	90.31	67.11	23.20	6.820
	Girl	91.37	69.45	21.92	6.258
	Total	90.84	68.28	22.56	6.535
II	Boy	90.28	70.68	19.61	5.810
	Girl	91.66	70.15	21.51	6.306
	Total	90.97	70.41	20.56	6.060
III	Boy	90.51	70.57	19.94	6.021
	Girl	91.39	70.39	21.01	6.181
	Total	90.95	70.48	20.47	6.102
IV	Boy	90.77	68.42	22.35	6.329
	Girl	91.12	70.98	20.14	5.796
	Total	90.95	69.70	21.25	6.065
V	Boy	90.93	70.84	20.09	5.479
	Girl	90.76	76.28	14.48	4.313
	Total	90.85	73.56	17.28	4.922

School Level Impacts

- The difference in the **promotion rates** are also statistically significant across different grades. For the PESP recipient students it varies between 84 and 95 % whereas for the non-recipient student the in most cases promotion rate is below 40%

Grades	Gender	PESP	Non-PESP	Difference	S. Error
I - II	Boy	83.63	37.18	46.45	3.31
	Girl	83.98	42.67	41.31	3.41
	Total	83.81	39.93	43.88	3.36
II-III	Boy	94.42	39.37	55.05	4.58
	Girl	95.57	39.46	56.11	5.2
	Total	95	39.42	55.58	4.89
III-IV	Boy	84.03	37.3	46.73	4.11
	Girl	85.46	37.84	47.62	3.88
	Total	84.74	37.57	47.17	4
IV-V	Boy	86.94	36.89	50.06	4.79
	Girl	93.98	37.01	56.98	7.42
	Total	90.46	36.95	53.52	6.11

School Level Impacts

- **Repetition rates** are less than 2 % for stipend recipient students across five grades whereas for non-beneficiary students the rate is no less than 10% for any grade and the rate increases in the higher grades. For both groups of student, girls' performance is better compared to the boys' performance

Grades	Gender	PESP	Non-PESP	Difference	S. Error
	Boy	0.33	13.53	-13.2	2.48
II	Girl	0.27	10.27	-9.99	2.09
	Total	0.3	11.9	-11.6	2.29
	Boy	1.79	16.39	-14.59	2.63
III	Girl	0.97	12.82	-11.85	2.2
	Total	1.38	14.6	-13.22	2.42
	Boy	1.3	20.02	-18.71	2.79
IV	Girl	1.12	18.95	-17.83	2.92
	Total	1.21	19.48	-18.27	2.85
	Boy	1.38	16.86	-15.48	2.75
V	Girl	0.86	16.59	-15.73	2.81
	Total	1.12	16.72	-15.6	2.78

School Level Impacts

- **Dropout Rate** is statistically lower for the stipend recipient students compared to the non-beneficiary students. For PES beneficiary students the dropout rate ranges between 3 to 16 %. On the contrary, half of the students in the non-beneficiary category were dropped out of the system.

Grades	Gender	PESP	Non-PESP
I - II	Boy	16.04	49.29
	Girl	15.75	47.06
	Total	15.89	48.18
II-III	Boy	3.79	44.24
	Girl	3.46	47.72
	Total	3.63	45.98
III-IV	Boy	14.67	42.68
	Girl	13.42	43.21
	Total	14.05	42.95
IV-V	Boy	11.68	46.25
	Girl	5.15	46.41
	Total	8.42	46.33

Findings from Qualitative Assessment

- Scope for Manipulation in Selection of Beneficiary Students
- Role of Implementers in Selecting Beneficiary Students
- Leakage and Under Coverage
- Transaction Burden in Collecting Stipend Money
- Improvement in Education Quality
- Rigging Numbers
- Capacity of the School Management Committee
- Declining Real Value of Stipend vis-à-vis Increasing Opportunity Cost
- Dual Card
- Teachers Effort and Work Load
- Workload of Ground Level Officials

Recommendations

- Reduce the transaction burden of collecting stipend
- Accelerate the reduction in dropout rates and increase the cycle completion rate
- Strict monitoring
- Sliding up the stipend rate
- Same rate of stipend allocation for up to two children in a HH
- A guideline with detailed instruction
- Active participation of SMCs to lessen workload of teachers
- Wider advocacy programs- increasing enrollment rates, coping strategy
- Role of the female member of the UP need to be utilized
- Selection bias or financial disincentive for the non-recipients students?

Thanks for your kind attention

??? Questions ???