Secondary and Higher Secondary Education in Bangladesh

Its Growth and State Expenditures: A Time-series Analysis of 1981-90

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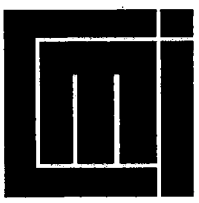

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Summary:

This paper first identifies trends and patterns in the growth of the secondary and higher secondary schools in Bangladesh, while differentiating between the Islamic *madrassa* schools, and the general (mainstream) ones. Substantial differences are also found between rural and urban schools. Secondly the role of the state in this sub-sector of education is related to general policies of regulation, standardisation, certification, and most important to its financial role for recurrent and development costs. The third objective of this paper is to formulate some suggestions for policy conclusions and future research.

Sammendrag:

Dette notatet analyserer utviklingstrekk i veksten av den videregående skolen i Bangladesh, som omfatter både de islamske *madrassa*-skolene, og de mer "vanlige" skolene. Det viser seg at det eksisterer betydelige forskjeller, bl.a. mellom skoler i byene og på landsbygda. Ettersom det er få statlig eide skoler, består statens rolle i hovedsak i regulering, godkjenning og standardisering, og ikke minst ved finansiering av både løpende utgifter og investeringer. I siste kapittel formulerer forfatteren sine forslag til ny politikk overfor dette skoletrinnet, samt forslag til videre forskning.

Indexing terms:
Secondary education
Educational policy
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To be ordered from Chr. Michelsen Institute, Department of Social Science and Development, Fantoftvegen 38, N-5036 Fantoft, Norway. Telephone:+47 5 574000. Telefax:+47 5 574166

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1. Introduction

The present paper intends to analyse the development of the secondary and higher secondary sub-sector of education in Bangladesh in the last decade of the 1980s. It will try to relate the development in the sub-sector with the role of the State.

Why are we interested in studying the role of the state vis-à-vis the development of secondary and higher secondary education sub-sector in Bangladesh? *Firstly*, in general, a case is made for treating entitlement to/availability of basic education (along with health) as a public good, in addition to defence, law and order, and justice.[1] In Bangladesh it has been found that a person in most cases does not acquire the general standards of basic education (with regard to reading, writing and arithmetic) before completing eight years of formal schooling years.[2] Therefore, education up to junior secondary level (i.e., class VIII) defines basic education in Bangladesh. The state should play an important role, indirectly or directly if necessary (when and where other agents such as individuals and community are not playing the desired role) to make the vast multitudes of people (around 65 per cent of the total population aged nine years or above) equipped with basic education and help them become better economic and social agents. *Secondly*, and this is linked to the last sentence, people armed with basic education are more productive.[3] For efficiency and growth, education (up to secondary level in Bangladesh) should be made easily accessible and available, if possible

1 See Tanzi, Vito, 1991, *Public Finance in Developing Countries*, Edward Elgar Publishing Ltd., England, Chapter 1, pp. 1-9.

2 As recent as February, 1992, we conducted a set of tests on 30 male-adults in the metropolitan area of Dhaka.The tests were designed keeping in mind the broad aims of basic education agreed upon at the World Conference on Education, held in Bangkok (Jomticu) Thailand, 1990. It was found that the people with education upto class (grade) VIII or above could satisfy the basic education levels with regard to reading, writing and arithmetic tests.

3 See Wadi D. Haddad et al. (1990), p.6. A review of empirical studies on relationship between education and economic development by the authors shows that there is a statistically significant relationship between farm productivity and years of schooling. When modernizing inputs such as mechanized irrigation, fertilizers, pesticides, are combined with basic education (upto eight years of schooling) the farm productivity is much higher as compared with a control ('without') situation. In case of non-agricultural activities, inspite of a number of difficulties (e.g., not being able to control for ability differences, social class differences), the estimates of rates of return give us important insights into the relative economic payoff to education. The rates of return for each level of education differs among countries at varying levels of development. It shows countries with lower level of development obtain higher degree (rate) of economic payoff from each level of education.

universal. On Bangladesh, Hossain[4] shows with a country-wide sample survey of households that there is a statistically significant relationship between farm productivity and basic education (with schooling up to eight years i.e., class VIII). He also shows that in non-agricultural activities, people engaged in petty-trading, groceries, small-scale or cottage industsries, obtain economic return for their education. *Thirdly*, education has a clear equity aspect. Like any other society on earth, Bangladesh has an unequal distribution of assets and opportunities among its people. A more egalitarian access to education should help economic and social mobility in the country.

With the above mentioned perspective of basic education for the country in our mind, we will try to explore the following topics in this paper:

(1) What has been happening to the secondary and higher secondary education sub-sector in terms of enrollment-growth and transition-rates? What types of institutions, public or private, are engaged in the sub-sector and what are their salient features?

(2) How is the State involved in the maintenance and development of the sub-sector?

(3) Some suggestions for future research and policy conclusions.

[4] Hossain, Mahabub (1988), "Return to Education in Bangladesh", *Bangladesh Development Studies*, September issue.

2. Salient features of secondary and higher secondary education sub-sector

2.1 Institutions, students, teachers, physical facilities, recurrent costs

In 1991, there were 16,653 institutions in the sub-sector (see Table 1.1). Two broad types of institutions are covered in the sub-sector, namely (a) the mainstream (relatively secular) general education; (b) the Islamic (*madrassa*) education. Over the years the *madrassa* education has also become a general type of education (thus differing from vocational/ polytechnic type of education) with a good mix of subjects on literature, mathematics, social sciences, general science but with definite specialization on the Koran and the Hadith (the life of prophet Muhammad). Of the total institutions of 16,653, the highest share (about 52 per cent) is by the secondary (general) type, then follows the *madrassa* secondary (26 per cent) and the junior secondary (around 12 per cent). Institutions teaching higher secondary levels of education comprise a small share. Over the last decade (1981-1991) the institutions in the sub-sector have grown (simple average) at a rate of 4.41 per cent per annum, the highest rate (15.4 per cent/annum) being for the secondary *madrassas* and the lowest (a negative rate of 1.91 per cent/annum) for the junior secondary schools. It is likely that a good number of junior secondary schools have been upgraded to fully-fledged secondary schools in the reference period.

In 1991, there were about 4.5 million students enrolled in the secondary and higher secondary sub-sector; roughly 70 per cent of the total students were in the secondary (general) schools and 14 per cent in the secondary *madrassas*. It is clear that both types of secondary institutions carry a higher number of students per institution when compared with the higher secondary institutions e.g., colleges and *Alim madrassas*. Again, among the secondary schools, the urban schools are more intensively utilized as compared with their rural counterparts. For example in 1990, the average enrollment size per rural secondary school was 405 and the comparable estimate for the urban school was higher by 61 per cent i.e., 653.

Student-teacher ratios do not vary significantly between the urban and the rural schools. In 1990 there were 3.6 to 3.7 per 100 students in the secondary schools. Four-fifths of total teachers in the secondary schools are qualified with at least the first degree and there is no significant rural-urban gap. Class area per pupil is an important index of physical facilities available, though there may be significant differences of quality of physical facilities among schools (e.g. the rural schools

may possess mud-built floors and the urban schools concrete cemented floors). A comparison of class-area availability per pupil between the public and the private schools shows a striking difference in favour of the public schools. An estimate for 1990 reveals that a public secondary student enjoys roughly 46 per cent more space (i.e., class-area) as contrasted with a private secondary student. There is no doubt that the physical facilities in the public schools are also of much higher quality. The public schools are exclusively concentrated in the metropolitan areas of Dhaka, Chittagong, Khulna and Rajshahi and the district towns. Therefore, these are urban schools. A comparison of physical facilities between the urban private schools and the rural private schools can be made. There is a small advantage by the urban private schools, as shown in Table 1.1.

Table 1.1
Secondary school system[1]. Institutions, teachers, students, class-area, public-private, urban-rural. 1981 and 1991

Aspect	Estimates		Annual Rate (1981 -91) of growth in percent (simple average)
	For 1981 (1)	For 1991 (2)	
1. Number of institutions	11,559	16,653	4.41
(a) Junior Secondary	2,039	2,000	-1.91
(b) Secondary (general)	6,721	8,175	2.97
(c) Dakhil (Madrassa, secondary)	1,682	4,270	15.4
(d) Higher Secondary (Intermediate Colleges)	263	323	2.28
(e) Alim (Madrassa, higher secondary)	530	798	5.05
(f) Degree Colleges 2	324	547	6.88
2. Total students	27,13,360	45,15,136	6.64
(a) Secondary (general)	22,17,000	31,56,119	4.24
(b) Dakhil madrassa	2,11,210	6,14,213	19.1
(c) Higher secondary	2,06,000	5,79,824	18.1
(d) Alim madrassa	79,150	1,64,980	10.8
3. Students per school 3			
(a) Urban secondary		653	
(b) Rural secondary		405	
4. Teachers in Secondary Schools 4			
(a) Per 100 students in urban school		3.6	
(b) Per 100 students in rural school		3.7	
(c) Per urban school		23.5	
(d) Per rural school		14.9	
(e) In urban School qualified upto First degree or beyond, percent of the total		81.05	
(f) In rural school, qualified upto First degree or beyond, percent of the total		82.02	
5. Class-area per student (in sft.) in secondary schools 5			
(a) Public		19.2	
(b) Private		13.1	
(c) Rural (private)		13.6	
(d) Urban (private)		14.8	
6. Recurrent costs (Taka) per student / year in Secondary Schools (1987-88) 6			
(a) Urban private		2,072	
(b) Rural private		1,013	

Notes:
1. By the term we include here all the classes from VI to XII under the general education system and the *Madrassa* (Islamic school) system.
2. Almost every degree college in Bangladesh provides education to students at classes XI and XII. In a typical degree college, roughly 60 percent of the total students belong to the higher secondary level. That is the reason behind including the degree colleges here.
3. See Alam and Salimullah, 1991.
4. Alam and Salimullah, 1991.
5. Alam and Salimullah, 1991.
6. Alam, 1992.

Sources:
BANBEIS, *Bangladesh Educational Statistics, 1987*, Dhaka 1988.
BANBEIS, *Bangladesh Educational Statistics, 1991*, Dhaka 1992.
Alam, M. 'Performance of Non-Government Secondary Schools in Rural Bangladesh', *Bangladesh Development Studies* (forthcoming) September 1992.
Alam, M. and Salimullah, M., *Performance of Secondary School Students in Bangladesh: Individual, Family and School-based Determinants*, BIDS, Dhaka 1991.

Another glaring aspect of urban-rural difference in terms of opportunities is reflected in the recurrent expenditures (or costs) per pupil in the private secondary schools. For example in 1987-88, per capita recurrent expenditure for an urban (private) school student was Tk.2072, which was double the comparable estimate for a rural (private) school student (Tk. 1013). It is obvious that the urban (private) schools can mobilize more resources from the community and parents in terms of tuition fees, subscriptions and donations. The rural areas are starved of financial resources and cannot offer their students as much resources and facilities as the urban students get in their schools.

2.2 Institutions by management type

The secondary and higher secondary education sub-sector of Bangladesh is an example of private provisioning of public goods; over 92 per cent of the total institutions belonged to the private sector in 1991 (see Table 1.2). In fact, the institutions under the Islamic system are 100 per cent under private management. In larger number of cases the secondary schools are under private management. The inclusion of degree colleges (which comprise higher secondary section) brings down the average (per cent) share under private management.

Table 1.2
Educational institutions at secondary and higher secondary levels by management type, 1991

Level	Management type (% of total)		Total (absolute) numbers
	Public (1)	Private (2)	
(a) Junior school		100.0	2000
(b) Secondary school	3.3	96.7	8715
(c) Dakhil Madrassa		100.0	4270
(d) Intermediate college	4.0	96.0	323
(e) Alim madrassa		100.0	798
(f) Degree college	37.3	62.7	547
Total	7.8	92.2	16653

Source: BANBEIS, *Bangladesh Educational Statistics, 1991* (Dhaka 1992).

2.3 Enrollment-growth

It is estimated that secondary enrollment (both general and *madrassa* together) grew at a rate (anually compounded) of 4.1 per cent/annum in 1981-90 (see Table 1.3). The estimated rate of growth for general secondary section was 3.08 per cent/annum while the comparable estimate for the *madrassa* (*Dakhil*) section was

much higher at 11.4 per cent/annum. The enrollment in the *Dakhil madrassas* started from a low base of around 2,11,000 in 1981 and increased to 6,14,000 in 1990. The comparable figures for the general secondary schools were much higher; the enrollment size in 1981 was 22,17,000 and 31,55,000 in 1990.

In the higher secondary section (both general and *madrassa* together) enrollment grew at a rate (annually compounded) of 10.3 per cent/annum in the reference period. In contrast to the secondary section, the rate of growth was estimated to be higher for the general type of institutions (i.e., in the colleges) than in the (*Alim*) *madrassas*. We can observe a tendency among the students from this pattern — a large number of students (most probably in the rural areas) enrolling under the Islamic system at the secondary school level and then switch to the general system (i.e., to the colleges) at the higher secondary level. The rate of growth of enrollment for the whole secondary and higher secondary sub-sector was around 5 per cent/annum for the period. It seems the enrollment growth rates have been good for the sub-sector if one compares it with the growth rate of population.

Estimates of participation in education by level (i.e., secondary and higher secondary) and gender should give us some idea with regard to achievement in enrollment compared to population growth. Table 1.3 shows that the male participation rate (gross) at the secondary level went up from 31.0 per cent in 1981 to 35.5 per cent in 1990. The female participation rate (gross) for the same level was much lower 12.2 per cent in 1981 and 16.1 per cent for the terminal year. At the higher secondary level, the (gross) participation rate for the male was 11.0 per cent in 1981 and 21.5 per cent in 1990. For the same level, the (gross) participation rate for the female was much lower, only 3.2 per cent (in 1981) and 7.6 per cent (in 1990). Thus, the society has to do a lot to bring a huge number of potential students under the educational system.

2.4 Transition rates

Transition rates for all types (both general and *madrassa* and secondary and higher secondary) are not available for the past years. Only a recent study by Alam and Salimullah (1991) comes up with definite estimates of transition for the general secondary schools. The study presents estimates by public-private, rural-urban and male-female divides for the cohort which entered class VI in 1985 (see Table 1.4). For the country as a whole, it is estimated that of the cohort only 45 per cent make it (i.e., are promoted) to class X in the right year (i.e., 1990). A huge amount of wastage in resources can be observed during the transition of the cohort from class VI to X. Around 27 per cent of the total students originally enrolled either fail or discontinue. Another 20 per cent repeat at different grades. Significant differences are observed in promotion rate (and also in other similar indicators of performance) when a comparison is made between the males and the females (in favour of the former), and between public and the private school (in

favour of the public school students). In general, the promotion rate does not significantly vary between urban and rural schools.

The public exam results (conducted by the educational boards) give another indicator of performance of the students and also of the education system. In 1985-90 the graduation rate (of those who appeared at the secondary school certificate exam) was 49.2 per cent. It was roughly 91 per cent for the public schools and 47.6 per cent for the private schools. (See Alam and Salimullah, 1991, chapter 2). The graduation rate (of those who appeared at the public exams) for the higher secondary (general) level varied roughly between 40 and 70 per cent in the last decade.

Table 1.3
Enrollment at secondary and higher secondary levels, 1981-1990
(Figures in 100,000)

Types/levels of education		1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Percent rates of growth (exponential), 1981-90
1. General Secondary (classes VI - X)	Male(M)	15.85	16.64	16.50	16.83	17.43	17.92	19.22	19.40	19.29	19.78	
	Female (F)	6.32	7.64	7.83	8.01	8.41	8.68	8.20	9.28	9.72	10.16	
	Total (T)	22.17	24.28	24.33	24.84	25.84	26.60	27.42	28.68	29.01	29.94	3.08*
2. *Madrassa* Secondary (*Dakhil*)	M	1.92	2.25	2.27	2.81	2.98	3.55	4.62	4.06	4.28	5.56	
	F	0.19	0.27	0.27	0.33	0.35	0.43	0.54	0.56	0.59	0.59	
	T	2.11	2.52	2.54	3.14	3.33	3.98	5.16	4.62	4.87	6.15	11.4*
A. Sub-total	M	17.77	18.89	18.77	19.64	20.41	21.47	23.84	23.46	23.57	25.34	
	F	6.51	7.91	8.10	8.34	8.76	9.11	8.74	9.84	10.31	10.75	
	T	24.28	26.80	26.87	27.98	29.17	30.58	32.58	33.30	33.88	36.09	4.1*
1. General higher secondary (classes XI and XII)	M	1.49	2.05	2.07	2.22	2.45	3.09	3.84	3.87	3.81	3.96	
	F	0.57	0.78	0.79	0.86	0.95	1.27	1.45	1.49	1.63	1.69	
	T	2.06	2.83	2.86	3.08	3.40	4.36	5.29	5.36	5.44	5.65	11.3*
2. *Madrassa* Higher secondary (*Alim*)	M	0.75	0.95	0.95	1.15	1.15	1.24	1.42	1.45	1.47	1.46	
	F	0.04	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.10	0.11	
	T	0.79	1.02	1.02	1.23	1.23	1.33	1.52	1.55	1.57	1.57	7.3*
B. Sub-total	M	2.24	3.00	3.02	3.37	3.60	4.33	5.26	5.32	5.28	5.42	
	F	0.61	0.85	0.86	0.94	1.03	1.36	1.55	1.59	1.73	1.80	
	T	2.85	3.85	3.88	4.31	4.63	5.69	6.81	6.91	7.01	7.22	10.3*
C. Grand Total Secondary and Higher Secondary (all types) = (A + B)	M	20.01	21.89	21.79	23.01	24.01	25.80	29.10	28.78	28.85	30.76	
	F	7.12	8.76	8.96	9.28	9.79	10.47	10.29	11.43	12.04	12.55	
	T	27.13	30.65	30.75	32.29	33.80	36.27	39.39	40.21	40.89	43.31	5.0*
Gross enrollment rate (percent)												
A. Secondary level	M	31.0	32.2	31.3	32.1	32.8	33.8	36.6	35.1	34.1	35.5	
	F	12.2	14.4	14.1	14.6	15.0	15.4	14.3	15.7	15.9	16.1	
	T	21.9	23.6	23.2	23.6	24.2	24.9	25.9	25.7	25.4	26.1	
B. Higher secondary level	M	11.0	14.3	14.0	15.1	15.6	18.4	21.7	21.8	21.3	21.5	
	F	3.2	4.4	4.3	4.5	4.8	6.2	6.9	7.0	7.5	7.6	
	T	7.3	9.5	9.3	10.0	10.4	12.5	14.6	14.7	14.6	14.8	

Note: * means statistically significant at one percent level.

Sources: 1. BANBEIS, *Bangladesh educational statistics, 1987*, Dhaka 1988
2. BANBEIS, *Bangladesh educational statistics, 1991*, Dhaka 1992
3. UNFPA, *Population projection for Bangladesh, 1960-2000 A.D. (Medium variant).*

Table 1.4

Cohort anlaysis of secondary school students who entered class VI in 1985

Class and year		Percent distribution of total students who entered class VI in 1985								Bangladesh
		Public	Private	Urban		Rural		Boys	Girls	
				Metropolitan	District town	Accessible	Remote			
VI (1985)	New Entrants	*881*	*3421*	*1006*	*1040*	*1355*	*901*	*3381*	*921*	
	R	4.8	6.2	9.2	5.6	5.5	3.3	5.7	6.7	6.1
	D	8.0	15.6	9.0	12.2	17.4	16.3	14.0	14.0	15.1
	P	87.2	78.2	81.7	82.2	77.0	80.4	80.3	79.3	78.8
	Total	100.0	100.0	99.9	100.0	99.9	100.0	100.0	100.0	100.0
VII (1986)	R	3.7	4.5	6.9	2.6	3.5	5.7	4.3	4.3	4.4
	D	6.2	4.8	1.3	8.4	6.3	3.8	5.0	6.0	4.9
	T	1.3	4.1	2.3	4.2	5.0	1.8	2.5	7.2	3.9
	P	76.0	64.8	71.2	67.0	62.1	70.1	68.5	61.8	65.6
	Total	87.2	78.2	81.7	82.2	76.9	81.4	80.3	79.3	78.8
VIII (1987)	R	3.9	4.3	5.5	4.0	3.8	4.0	4.4	3.8	4.3
	D	2.4	4.6	0.7	6.4	3.9	5.5	3.6	5.8	4.4
	T	3.7	2.3	3.2	3.4	2.6	0.9	2.8	1.7	2.4
	P	66.0	53.6	61.8	53.2	51.8	59.7	57.7	50.5	54.5
	Total	76.0	64.8	71.2	67.0	62.1	70.1	68.5	61.8	65.6
IX (1988)	R	2.3	5.5	5.9	5.7	3.5	4.8	5.0	4.2	5.3
	D	2.9	2.3	0.9	4.5	1.4	3.3	1.9	4.7	2.3
	T	1.1	1.8	1.3	1.5	1.6	2.3	1.5	2.3	1.8
	P	59.7	44.0	53.7	41.5	45.3	49.3	49.3	39.3	45.1
	Total	66.0	53.6	61.8	53.2	51.8	59.7	57.7	50.5	54.5
X (1989)		*526*	*1503*	*540*	*431*	*614*	*444*	*1667*	*362*	

Notes:

1. The following abbreviations apply:
   - P = promoted
   - D = dropped out (either failed or discontinued)
   - R = repeater
   - T = out-migration
2. Absolute numbers given in *italic* typeface
3. The Bangladesh estimates are properly weighted. See footnotes to Table 2.1 of Alam and Salimullah (1992).
4. Accessible schools within three kilometres of a metalled road
5. Remote schools more then three miles away from a metalled road

Source: Alam, M. and Salimullah, M., *Performance of Secondary School Students in Bangladesh; Individual, Family and School-level Determinants*, BIDS, Dhaka, 1992.

3. State participation

3.1 General policies of regulation, standardization, certification

In general, from the British colonial period, Bangladesh has inherited a strong role of the State in the field of education. At present, in the secondary and higher secondary sub-sector, the State plays an important role by setting the standards for education (i.e., the quality aspect), regulating the number of institutions and by certifying the successful completers (i.e., the graduates) through public exams. The standards for education for secondary and higher secondary sub-sector are mainly decided through development of curriculum and textbooks. There is a national curriculum/textbook agency known as the National Curriculum and Textbook Board (NCTB) which develops and publishes textbooks for all classes from the secondary and higher secondary sub-sector. All the institutions in the country belonging to the sub-sector uniformly have to prescribe these textbooks for their students. The number and the quality of educational institutions in the sub-sector are regulated by two state agencies: (1) the Directorate of Secondary and College Education (for general education) and (2) the *Madrassa* Board (for Islamic education). The Directorate or the Board (as the case may be) has to approve the recognition (on a renewable or permanent basis) of an educational institution in the sub-sector before it (the institution) can operate in the field. The Directorate/the Board must be satisfied that there is a demand for the (proposed) educational institution in the area, the organizers have enough physical and financial resources to back up their institution and also that the institution has adequate number of trained and properly qualified persons on the teaching staff. Lastly, there are four divisional education boards (belonging to each of the four administrative divisions) in the country which organize public exams every year for the secondary and the higher secondary final (certificate) students. The Madrassa Board located in Dhaka organizes the similar exams for the Islamic stream and is responsible for the whole country. Thus, for the education sub-sector by conducting the public exams through the divisional education board and the Madrassa Board, the State keeps an ultimate say on the quality and the quantity of the completers from the secondary and higher secondary education sub-sector.

Table 1.5
Recurrent costs to the state by major categories for
secondary and higher secondary sub-sector, FY 1981-1990
(in current crore Taka)

FY	1. Public Secondary (Percent share)							2. Private secondary (salary subventions)	3. Public higher secondary (Percent share)							4. Private higher secondary (salary subventions)	5. Private *Madrassas* (both Dakhil and Alim, salary subventions)
	Pay of officers (1)	Pay of establishment / admin. staff (2)	Allowances / honoria (3)	Contingencies (4)	Grants (5)	Subtotal (6)			Pay of officers (1)	Pay of establishment / admin. staff (2)	Allowances / honoria (3)	Contingencies (4)	Grants (5)	Subtotal (6)			
1981	55.3	8.3	20.2	16.2		100.0	7,196	36,187	52.6	7.9	28.9	10.6		100.0	9,414	6,171	
1982	46.9	7.1	32.6	13.4		100.0	8,552	43,138	53.0	7.0	31.0	9.0		100.0	11,385	7,218	
1983	46.4	10.0	31.8	10.6	1.2	100.0	9,665	69,284	48.7	10.6	28.8	11.0	1.2	100.3	12,459	18,086	16.07
1984	36.5	9.1	43.3	10.2	0.9	100.0	13,155	94,913	36.5	9.1	43.3	10.2	0.9	100.0	16,783	34,409	23.55
1985	48.8	13.9	29.5	7.2	0.6	100.0	20,076	106,593	41.4	11.7	40.3	6.1	0.5	100.0	14,994	14,070	29.85
1986	48.2	13.6	29.7	7.9	0.6	100.0	23,329	148,152	48.1	11.6	32.0	7.8	0.5	100.0	27,003	63,071	51.66
1987	41.7	12.2	36.9	8.7	0.5	100.0	27,133	160,041	41.7	12.0	36.8	8.6	0.9	100.0	32,717	68,090	58.07
1988	42.4	11.8	37.3	8.0	0.5	100.0	30,817	160,041	42.8	11.7	37.3	8.0	0.2	100.0	35,722	68,090	58.63
1989	38.4	10.8	42.8	7.5	0.4	99.9	36,337	185,587	38.9	11.0	42.1	7.6	0.4	100.0	42,815	78,630	63.74
1990	38.2	11.1	42.8	7.5	0.4	100.0	38,565	194,856	38.0	11.2	42.9	7.5	0.4	100.0	43,637	86,907	72.34
ALL	**42.5**	**11.4**	**36.9**	**8.6**	**0.6**	**100.0**			**42.3**	**11.2**	**37.9**	**8.2**	**0.4**	**100.0**			

Sources: GoB, Ministry of Finance, *Annual Budgets (Revenue)*, various issues from 1981 to 1991

3.2 The financial role of the state

3.2.1 Principles

The State follows a simple set of principles in financing the secondary and higher secondary educational (both general and *madrassa*) institutions. All the costs (whether recurrent or capital) of the publicly-owned institutions are borne by the State. (See Appendix A for the concepts and definitions of costs utilized in the educational financing of Bangladesh.) From section 2.2 (and Table 1.2) we know that the overwhelming 92.2 per cent of the total institutions belong to the private (non-State) sector. The State finances 70 per cent of the salary bills of the staff (mainly teachers) of the recognized or approved institutions. The recognition part of the institutions by the State is quite tough and time-consuming. Following the general principles (described in section 3.1) with regard to regulation, standardization and certification of the educational institutions, the relevant directorate or Board scrutinizes each of the institutions, especially the new private ones. If an institution passes the general scrutiny, the salary-subvention aspect is only natural to follow.

3.2.2 Recurrent cost

Pattern

Since the private (non-State) educational institutions are overwhelming in number and there is only a salary-subvention aspect of these institutions, the State's financial role mainly relates to recurrent costs of their operation. Table 1.5 presents estimates of recurrent costs for the sub-sector, in the period 1981-90. Column 2 gives estimates for the private secondary schools, column 4 for the private higher secondary institutions and column 5 for the private *Dakhil* and *Alim madrassas*. The estimates are given in current crore (1 crore = 10 million) Taka. It is observed that the allocations in current Taka for the private educational institutions have gone up by more than five times in the case of secondary schools, more than 14 times in the case of higher secondary institutions and more than four times in the case of *madrassas*.

In the same table, more information is given about the recurrent expenditures of the public (i.e., fully State-owned) institutions. Column 1 gives the estimates for the public secondary schools and column 3 for the public higher secondary institutions. The pattern of recurrent expenditures in these institutions can be summed in the following way:

(a) The pay of officers (all white-collared staff, including the teachers) comprise the largest part of the recurrent cost, averaging roughly 42.5 per cent of the total in the last decade. The percentage share was much higher in FY 81. But it has gradually come down to a share of 38 per cent.

(b) The pay of blue-collared staff comprises on an average 11 per cent of the total recurrent expenditures. Over the decade, it has grown by 2 to 3 per cent.

(c) One curious development is the growth of allowances/honoria from 20 per cent in FY 81 in the case of public secondary institutions to 43 per cent in FY 90. Similarly in the case of public higher secondary institutions the share of this particular component has grown from 28 per cent in FY 81 to 43 per cent in FY 90. These financial benefits are mainly enjoyed by the white-collared first class job-holders.

(d) The shares of contingencies and grants averaged out to around 8 per cent (in both cases of secondary and higher secondary) and 0.6 to 0.4 per cent respectively.

Rate of growth

Table 1.6 presents estimates of recurrent costs per enrolled student for FY 81-90 for four different categories of students i.e., general (secondary and higher secondary) and *madrassa* (*Dakhil* and *Alim*) types. The estimates are given in 1989-90 constant Taka. See column 4 of the table. For secondary (general) category, the unit cost was Tk. 398 in FY 81 which has increased to Tk. 694 in FY 90. The estimated rate of growth (annually compounded) for the period is 7.25 per cent/year. For higher secondary (general) category, the unit cost was Tk. 1520 in FY 81 and it has risen to around Tk. 3000; the rate of growth (annually compounded) is estimated at 8.21 per cent/year. For *Dakhil* and *Alim* students, the unit costs in FY 83 (from that year budget-allocations have been made by the State) have risen from around Tk. 735 to Tk. 833 (in the case of *Dakhil*) and to Tk. 795 (in the case of *Alim*) respectively; the rates of growth of unit costs are 1.2 per cent/annum (for *Dakhil*) and 1.1 per cent/annum (for *Alim*) respectively. The estimates are not statistically significant. It is observed that the *madrassa* education vis-à-vis the general category has a lower unit cost and a low rate of growth of the unit cost. In fact, this is quite expected.

3.2.3 Development or capital costs

The State incurred capital or development expenditures for secondary (general) and higher secondary (general) institutions. No such costs were incurred for the *madrassa* education in the period under review. In the total developmental allocation for education sector the share of secondary and higher secondary (general) institutions averaged around 12 to 19 per cent. The allocation for FY 81 was Tk. 976.84 crone (in current taka) and the highest was for FY 87, which was Tk. 4898.97 crore (in current taka). For the FY 90, the allocation was unusually low, only Tk. 20.00 crores (in current taka). A detailed list of the development projects in the secondary and higher secondary sub-sector is given in Appendix B. Broadly, the development projects were on conversion of secondary schools into

community schools, science education programme, improvement of physical facilities, conversion of private institutions to public institutions (mainly colleges), internal scholarship for general education.

Table 1.7 presents the development costs (in 1989-90 constant taka) per enrolled student for secondary (general) and higher secondary (general) categories for the period FY 81 to FY 90. For the secondary category, the unit cost was Tk. 4498 in FY 81, then it went upto Tk. 18047 in FY 87 and again went down to Tk. 50 in FY 90. Similarly, for the higher secondary category also, one observes a highly erratic behaviour of the per unit allocation of development expenditures by the State. For example, for FY 81 the estimate was Tk. 15692. The following year i.e., FY 82 the estimate fell to Tk. 4337. It increased to Tk. 29842 in FY 85 and again fell to an abnormally low estimate of Tk. 49 in FY 90.

The estimates of rates of growth of development cost per enrolled for student secondary and higher secondary education for the period are negative, though not statistically significant. The estimates are: (-) 11.1 per cent/annum for secondary education and (-) 13.7 per cent/annum for higher secondary education.

Table 1.6
Unit recurrent costs per enrolled students for secondary and higher secondary sub-sector, FY 81-90

Fiscal years (FY)	(1) Students (in 100,000)				(2) Total Recurrent Costs (in current 10,000,000 Taka)				(3) Conversion ratio for constant price (' 89-90=100)	(4) Unit Cost (in 1989-90 Taka)			
	1. General		2. Madrassa		1. General		2. Madrassa			1. General		2. Madrassa	
	(a) Secondary	(b) Higher secondary	(a) Dhakil	(b) Alim	(a)	(b)	(a)	(b)		(a)	(b)	(a)	(b)
1981	22.17	2.06	2.11	0.79	43.383	15.585			2.01	398	1520		
1982	24.28	2.83	2.52	1.02	51.690	18.603			1.90	406	1249		
1983	24.33	2.86	2.54	1.02	78.949	20.545	11.460	4.610	1.63	532	1171	735	736
1984	24.84	3.08	3.14	1.24	108.068	28.614	18.250	7.197	1.40	609	1300	824	806
1985	25.84	3.40	3.33	1.33	126.669	37.155	21.758	8.093	1.34	657	1464	876	815
1986	26.70	4.36	4.08	1.52	171.481	90.074	38.943	12.716	1.24	796	2562	1184	1037
1987	27.42	5.39	5.16	1.56	187.174	100.807	44.835	13.233	1.17	798	2188	1017	954
1988	28.68	5.36	5.62	1.57	190.858	103.812	45.914	12.714	1.08	722	2092	882	874
1989	29.01	5.44	5.87	1.58	221.924	121.445	50.313	13.425	1.00	765	2232	857	849
1990	29.94	5.65	6.15	1.65	233.416	130.544	57.605	14.737	0.89	694	2497	833	795

Rates of growth (percernt/annually compounded) of recurrent cost/student at 1989-90 constant Taka are:

(1) For secondary general (rs) = 7.25 *
(2) for higher secondary (rhs) = 8.21 *
(3) For Madrassa, Dahkil (rd) = 1.2
(4) For Madrassa, Alim (ra) = 1.1

Note: * means the estimate of growth-rate is significant at one percent level.