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A Critical Assessment of Free Public Schooling in Pakistan

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1. INTRODUCTION

Pakistan appeared on the map of the earth on August 14, 1947 as the British left the Indian subcontinent. The World Bank (1992) classifies Pakistan as a low income country on the basis of its per capita GNP. It is the ninth most populous and perhaps one of the fastest growing nations of the world.

Unfortunately, Pakistan has also been one of the most illiterate countries of the world. Statistics collected four years after independence show that 86 percent people at that time could not read or write in any language. Taking note of this disturbing situation, almost all the relevant government documents ranging from the reports of various commissions formed to reform education to policy documents like five year plans emphasise eradication of mass illiteracy and provision of universal primary education as an objective of public policy. Free education for all has been traditionally advocated as a policy which would sooner or later achieve these goals. This policy has also been considered desirable from the view point of equity and social justice.

At the time of independence, almost all the schools in the rural areas were public schools which charged only nominal tuition. In the urban areas a few private schools usually run by religious or community organisations could also be found. In October 1972, all the private schools were nationalised and education up to tenth grade was made free. Opening of private schools was again allowed in 1979. With this began an era of expensive private schools, particularly in the urban areas, existing side by side with low quality free public schools.

Free schooling financed by government funding dominated our educational scene till the decade of 80s. The purpose of this article is to critically evaluate the

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performance of this institutional arrangement, and to see where did we stand at the end of this period. In the next section we look at the severity and future prognosis of the resource constraint which is one of the major causes of the decline of our government owned school system. Section 3 examines the state of education in which we find our country after several decades of emphasis on free provision of schooling by the government. Implications of this policy for educational equality and efficient resource allocation are the focus of Sections 4 and 5 respectively. The final section presents some concluding remarks.

2. FREE EDUCATION WITH RESOURCE CONSTRAINT

Providing free education to such a large population as Pakistan's is a formidable task. This task has been made even more difficult by the limited availability of public resources. Table 1 gives federal government's expenditure on defence, debt servicing, general administration, and social services at constant prices of 1980-81 as well as percentage share of these categories of expenditure in the total current expenditure for the period from 1981-82 to 1989-90. A quick glance through these figures reveals that defence and debt servicing constitute more than 60 percent of total expenditure and the expenditure on all the social services combined is close to a meagre three and a half percent. For the purpose of comparison, Table 2 presents share of defence, all social services combined, and education in total central government expenditure of some countries of the region. According to these figures, India and Pakistan's percentage of defence expenditure is the highest in the region while their percentage of expenditure on the social services is the lowest. Pakistan's consolidated federal and provincial government spending on education during the 80s presents a much better picture in terms of both level and as percentage of GNP (See Table 3). Nonetheless, it falls short of the UNESCO recommended minimum expenditure on education which is 4 percent of the GNP for developing countries.

Any substantial increase in public spending on education is difficult to achieve and sustain.[1] The efforts to increase expenditure on education by shifting resources from the two major heads of federal government expenditure, namely defence and debt servicing, are unlikely to succeed in the short run due to various domestic, external, and geo-political circumstances. Various drives to increase government revenues have also been unsuccessful in the past. Studies of tax shifting in Pakistan [see e.g. Irfan (1974); Naqvi (1975) and Jeetun (1978)] suggest that a substantial part of the indirect taxes, which constitute more than 80 percent of the total tax revenues, is shifted forward to the consumers. Given low per capita income and mass poverty, this burden cannot be increased any further without adverse political implications.

[1]Against all odds, the government has managed to significantly increase spending on social services including education under its Social Action Program. However, serious doubts have been expressed about the sustainability of this programme [see Pasha (1997)].

Table 1

Pakistan's Federal Government Current Expenditure on Defence, Debt Servicing, General Administration, and Social Services at Market Prices of 1980-81, and as Percent of Total Expenditure

Fiscal Year	Total Expenditure	Defence	Debt Servicing	General Administration	Social Services
1981-82	53,513	18,155	12,841	2,009	1,458
		(33.93)	(24.00)	(3.75)	(2.72)
1982-83	58,726	20,170	16,835	2,196	1,664
		(34.35)	(28.66)	(3.74)	(2.83)
1983-84	61,585	21,743	18,020	3,226	1,866
		(35.30)	(29.26)	(5.24)	(3.03)
1984-85	75,187	24,145	19,000	3,123	1,899
		(35.38)	(27.84)	(4.58)	(2.78)
1985-86	73,389	24,653	21,847	3,399	2,188
		(33.59)	(29.77)	(4.63)	(2.98)
1986-87	78,504	29,010	24,548	5,006	2,893
		(36.95)	(31.27)	(6.37)	(3.69)
1987-88	87,171	30,101	27,946	3,264	3,136
		(34.53)	(32.06)	(3.74)	(3.60)
1988-89	92,232	30,108	32,531	3,340	3,033
		(32.65)	(35.27)	(3.62)	(3.29)
1989-90	95,936	32,518	36,077	3,824	2,825
		(33.90)	(37.61)	(3.78)	(2.95)

Source: Calculations based on Pakistan (1990, 1993).
Note: Figures in parentheses are percentages.

Table 2

Percentage Share of Defence, Social Services, and Education in Total Central Government Expenditure of Selected Countries in 1990

Name of Country	Defence	Social Services[a]	Education
Bangladesh	10.1	16.0	11.2
India	17.0	4.1	2.5
Nepal	6.0	15.7	10.9
Sri Lanka	7.4	15.3	9.9

Source: World Bank (1992).
[a]Health and education combined.

Table 3

Pakistan's Consolidated Federal and Provincial Government Expenditure on Education at Market Prices of 1980-81

Fiscal Year	Total Expenditure (Million Rupees)	Expenditure on Education (Million Rupees)	Expenditure on Education as % of Total Expenditure	Expenditure on Education as % of GNP
1981-82	69,197	5,459	7.98	1.60
1982-83	75,665	5,619	7.43	1.60
1983-84	81,139	6,120	7.54	1.64
1984-85	88,513	7,747	8.75	2.0
1985-86	98,639	9,276	9.40	2.27
1986-87	106,960	10,752	10.05	2.52
1987-88	115,484	13,048	11.29	2.89
1988-89	118,620	15,048	12.69	3.19
1989-90	122,768	17,774	14.48	3.59

Source: Calculations based on Pakistan (1993).

The efforts to expand the base of direct taxes by including income from agriculture in it have been successfully blocked in the past by the powerful agriculturist lobby. The option of increasing budget deficit to finance education does not appear to be feasible either. Pakistan's budget deficit is already very high and the government is constantly under pressure from international donor agencies like IMF and the World Bank to reduce it. Running a huge budget deficit on a regular basis is not a sound policy because of its adverse implications for the economy including high rates of inflation and increasing public debt.

3. STATE OF EDUCATION IN PAKISTAN

A manifestation of the shortage of resources for education can be seen in the gap between targets and actual achievements of various education related goals during five year plans. Ahmed (1988), has studied discrepancies and inconsistencies between sixth five year plan targets and government policies. He points out that the downward revision of the expenditure targets of a typical five year plan for the education sector begins as soon as the implementation of the plan starts. No surprise that the plan targets are almost never achieved.

Table 4 below offers a comparison between the enrolment targets for primary and secondary schools set by the planners during various five year plans and the enrolment ratios which were actually achieved. It is evident from these figures that the advances on this front are far from a success story. Not only the gap between the targets and the achievement has been very wide, the attained enrolment rates are

themselves very low. This fact becomes clearer when we compare Pakistani figures with those for other countries in Table 5. The persistent difference between the enrolment rates of boys and girls is also something to worry about. A significant shortfall in five year plan targets of building new primary and secondary schools has also been reported [See Khan *et al.* (1986)].

Table 4

Target and Actual Enrolment Rates for Pakistan's Various Five-Year Plans

(Percentages)

	Fifth Plan (1978–1983)		Sixth Plan (1983–88)		Seventh Plan (1988–93)	
Gender	Target	Actual	Target	Actual	Target	Actual (1989-90)
Primary						
Both	68.0	44.4	75.0	48.6	80.6	49.3
Boys	90.0	60.0	90.0	63.0	89.0	64.1
Girls	45.0	30.0	60.0	33.5	70.0	33.8
Secondary						
Both	26.0	18.0	28.0	20.0	33.5	21.0
Boys	35.0	24.0	35.0	27.0	43.1	29.0
Girls	13.0	9.9	16.0	12.0	22.8	12.3

Source: Mahmood and Zahid (1992).

Table 5

Enrolment Rates by Level and Sex for Selected Countries in 1989

(Percentages)

Name of	Primary			Secondary		
Country	Both Sexes	Males	Females	Both Sexes	Males	Females
Bangladesh	70	76	64	17	23	11
India	98	112	82	43	53	31
Nepal[a]	86	112	84	30	42	17

Source: UNESCO (1992).

Note: The figures reported in this table are the ratios of the total enrolled students to the school age population multiplied by hundred. Since all enrolled students are considered for these calculations irrespective of their age, some figures are greater than hundred.

[a]Figures for Nepal are for the year 1988.

A more dramatic view of the resource constraint on education can be had by looking at per pupil expenditure. Despite very low enrolment rates, the available resources are thinly distributed over the enrolled students. According to the figures in Table 6, on the average Pakistan spent only 28.84 dollars on a primary school student in 1985 as compared to India's 29.52 dollars. Per pupil expenditure on secondary education was higher in absolute terms but still much less than Sri Lanka's 109.89 dollars per student.

Chronic shortage of public funds coupled with insistence on free education for all is one of the main causes of Pakistan's relatively little progress in this area. Long after independence, Pakistan is still lagging far behind other countries of the region in the field of education. Table 7 presents literacy rates for Pakistan as recorded during various censuses while Table 8 reports literacy rates for some other countries of the region. Although literacy in Pakistan has shown some increase over the decades, the progress in this area can be termed modest at best when compared to the objective of universal literacy. Pakistan's literacy rate is lower than that in Bangladesh, India and Sri Lanka and is far from close to hundred percent literacy in the industrialised countries. Given low enrolment rates at the primary level (Table 4), no immediate improvement in this situation can be expected in the short run. A grimmer picture emerges when we consider the fact that a high percentage of students drops out of primary school between grade I and grade II [Khan *et al.* (1987)].

Table 6

Expenditure Per Pupil for Selected Countries in 1985 (U.S. $)

Name of Country	Level of Education	
	Primary	Secondary
Bangladesh	15.19	31.55
India	29.52	39.40
Nepal	14.84	30.17
Pakistan	28.84	69.72
Sri Lanka[a]	N.A.	109.89

Source: Calculations based on UNESCO (1992).

[a]Figures for Sri Lanka are for the year 1986.

N.A.= Not available.

Table 7

Literacy Rates by Sex in Pakistan

(Percentages)

Census Year	Both Sexes	Males	Females
1951	13.2	17.0	8.6
1961	18.4	26.9	8.2
1972	21.7	30.2	11.6
1981	26.2	35.0	16.0
1993[a]	35.0	47.3	22.3

Source: Pakistan (1987).

Note: These figures are in accordance with the definition of literacy which was adopted in 1972 census. According to this definition, a literate person is one "who is able to read and write in some language with understanding".

[a]Census in Pakistan is conducted after every 10 years. The census scheduled for 1991 was delayed till 1998 for various political and administrative reasons and its results are not yet available. The figures for 1993 reported above are estimates of the Planning and Development Division of the Government of Pakistan [see Pakistan (1993)], and are likely to have an upward bias.

Table 8

Literacy Rates for Some Selected Countries in 1981

(Percentages)

Name of Country	Both Sexes	Males	Females
Bangladesh	29.1	39.1	18.0
India	40.8	54.8	25.7
Nepal	20.6	31.7	9.2
Sri Lanka	86.8	91.3	82.0

Source: UNESCO (1992).

Two unconventional programmes called *Iqra* and *Nai Roshni* were introduced during the sixth five year plan to increase literacy and primary education in the country. The *Iqra* Pilot Project was started in two districts, Rawalpindi and Islamabad. Volunteer teachers were required to teach reading and writing skills to adult illiterate students at a mutually agreed time and location. Books for this scheme were provided by the government at a nominal price and the teacher was offered an honorarium of Rs 1,000 per successful student. This project turned out to be a failure because of inability to detect false claims for honorarium money and shortage of resources.

The *Nai Roshni* programme was introduced on a nation wide basis. It was meant to provide an opportunity to those boys and girls who were 10 to 14 years old and had to leave school without completing primary education. The schools for these students operated in the buildings of the existing government schools after regular

school hours. No fee was charged from the students and books were provided free of cost by the government. This scheme also failed to provide the desired results and the authors of the seventh five year plan had to learn following lesson from this experiment:

> "The sixth plan experience has shown that a short cut to literacy is not only expensive but is hard to monitor. There is no substitute for formal education" [Pakistan (1988), p. 252].

Availability of teachers is considered to be an important indicator of educational facilities available to the students of a country. Pupils-teacher ratio is a reasonable proxy for it: the larger this ratio, the smaller the availability of teachers to the students. Pupil-teacher ratios in Pakistan as given in Table 9 are quite high for primary level, and have shown no significant drop. (Comparable figures of pupils per teacher for other countries are reported in Table 10.)

Table 9

Pupils Per Teacher in Pakistan's Primary and Secondary Schools

Year	Primary Schools	Secondary Schools
1981-82	36	17
1982-83	37	17
1983-84	39	17
1984-85	38	18
1985-86	39	18
1986-87	40	18
1987-88	40	17
1988-89	37	16
1989-90	37	16

Source: Calculated from Pakistan (1993).

Table 10

Pupils Per Teacher in Primary and Secondary Schools of Selected Countries in 1988

Name of Country	Primary Schools	Secondary Schools
Bangladesh	58	27
India	45	22
Nepal	37	29
Sri Lanka (1987)	14	N.A.

Source: UNESCO (1992).

4. FREE EDUCATION AND EDUCATIONAL INEQUALITY

Free education does not automatically lead to reduced educational inequality. The reason is that free provision and free consumption of a publicly produced good are not always the same thing. There is no guarantee that everyone who desires to benefit from a free public amenity like education will be able to do so. Many students are unable to enrol in a school or to continue their studies till completion of a particular level of education. The most common reason for this in the developing countries is not the monetary cost of education, which in most of the cases is negligible. It is the opportunity cost that constitutes a huge part of the total costs of education and is most likely to affect the decision to attend a school.

This is particularly true for the rural areas where schools are often far away from the home village of the student and colleges and universities are usually exclusively located in towns and big cities. In addition, the school age children are required to contribute to the household resources by doing either paid work or by participating in home production activities. Girls are usually expected to help their mothers in daily household chores. Presence of substantial unutilised capacity in the rural area schools in Pakistan [Khan *et al.* (1986a) and Mahmood and Zahid (1992)] lends support to this view.

Despite a long history of free public education, Pakistan still has to face a high degree of educational inequality. This inequality persists both across regions and gender. Though females constitute almost half the population of the country, they lag far behind males both in terms of enrolment rates and literacy rates (Tables 4 and 7). Table 11 shows a two-way classification by gender and region of the literacy rates calculated from 1972 and 1981 census data. The figures in this table show that the rural areas where almost 70 percent population of the country lives, have far smaller literacy rate than the urban areas. To further aggravate this situation, the extent of male-female inequality in literacy is much higher in rural areas. In fact more than 90 percent of the females living in the rural areas were illiterate according to 1981 census.

Those lucky few who are able to enrol in a school against such heavy odds still face a high probability of being dropped out, particularly in the early years of the primary school. Drop-out rates of various grades and levels are higher for the rural areas and girls [Khan *et al.* (1987)]. On the other hand, continuation rates, defined as the ratio of enrolments in the final grade of a level of education to the enrolment in the first grade of the same level as many years earlier as the number of grades in that particular level, are generally lower for girls and rural areas. This can be verified from the figures presented in Table 12. According to these figures, the continuation rate for the girls in the primary schools of the rural areas was only 28.1 percent during 1980–1985. In other words, out of all the female students who enrolled in the first grade in 1980-81, only a little more than one fourth were able to reach the final grade of the primary school in the specified time.

Table 11

Literacy Rates in Pakistan by Sex and Rural/Urban Area

(Percentages)

Region and Census Year	Both Sexes	Males	Females
All Pakistan			
1972	21.7	30.2	11.6
1981	26.2	35.0	16.0
1993[a]	35.0	47.3	22.3
Rural Areas			
1972	14.3	22.6	4.7
1981	17.3	26.2	7.3
1993[a]	26.7	N.A	N.A
Urban Areas			
1972	41.5	49.9	30.9
1981	47.1	55.3	37.3
1993[a]	56.0	N.A	N.A

Source: Pakistan (1993).

N.A = Not available.

[a]For 1993 figures, see note a, table 7.

Table 12

Continuation Rates by Rural/Urban Area and Sex in Pakistan's Primary and Secondary Schools

(Percentages)

	Primary				Secondary			
	Urban		Rural		Urban		Rural	
Time Period	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1975-76 to 1979-80	64.8	54.0	55.3	29.3	69.0	61.6	29.3	13.0
1980-81 to 1984-85	62.3	49.7	42.3	28.1	75.6	58.1	34.6	18.1

Source: Mahmood and Zahid (1992).

The representation of females among students and the teaching staff is quite inadequate both at primary and secondary levels of education. Percentage of female students and teachers reported in Table 13 is a testimony to this fact. Improvement in this situation has been almost negligible up till the 80s. For the purpose of comparison, Table 14 provides same indicators for some other countries as well. In case of Pakistan, percentages of female schools at primary and secondary level are also reported in Table 13 for different years, because up to this level male and female educational institutions are separate in most of the cases. These figures show that only about a quarter of the schools are meant for female students.

Another aspect of educational inequality is the inequality across various socioeconomic groups. In the developing countries, students from higher income groups are generally over-represented in the education system. Because of the paucity of data on income for developing countries, Mingat and Tan (1986) studied distribution of various education related variables among various professions in different regions of the world. Professions are a good proxy of income in the developing countries. Assuming that white collar workers earn more than the manual labourers who in turn earn more than farmers, they found out, in addition to other things, that in Asia, the poorest socioeconomic groups had the lowest share of enrolment in educational institutions relative to their share in population. Moreover, as we go to higher levels of education, the representation of these groups steadily declines. Khan and Siddiqui (1984) confirm severe under-representation of the individuals belonging to the lowest socio-economic group among the graduates of higher education in Pakistan.

Table 13

Some Indicators of Females' Share in Pakistan's Education by Levels

(Percentages)

	Primary Schools			Secondary Schools		
Year	% Female Students	% Female Teachers	% Female Schools	% Female Students	% Female Teachers	% Female Schools
1981-82	35.0	31.2	32.7	25.7	30.5	27.1
1982-83	32.5	30.0	28.4	25.6	30.1	29.2
1983-84	31.7	32.2	28.5	24.1	31.4	29.0
1984-85	32.5	31.9	29.2	24.7	30.5	28.5
1985-86	33.3	31.7	29.1	26.9	30.3	29.3
1986-87	33.1	32.7	24.1	27.1	30.8	29.9
1987-88	33.6	32.8	23.5	28.4	31.5	30.1
1988-89	33.4	32.0	26.6	29.5	31.2	31.7
1989-90	32.1	30.1	27.1	29.4	31.4	32.5

Source: Calculations based on data in Pakistan (1993).

Table 14

Some Indicators of Females' Share in Education by Levels for Selected Countries in 1988

(Percentages)

	Primary Schools		Secondary Schools	
Name of Country	% Female Students	% Female Teachers	% Female Students	% Female Teachers
Bangladesh	44	18	31	10
India	40	28	35	32
Nepal	32	11	27	8
Sri Lanka	48	N.A.	51	N.A.

Source: UNESCO (1992).
N.A. = Not Available.

Table 15 displays consolidated provincial and federal per pupil expenditures in Pakistan by levels of education. These figures are persistently higher for higher levels of education throughout the 80s. Moreover, according to Khan *et al.* (1986), 75 percent of the money spent by the government of Pakistan on scholarships goes to the institutions of higher education. When we put together these figures with the facts discussed in the above paragraph, it becomes apparent that the policy of free public education is more likely to aggravate educational inequality rather than alleviating it. As government spends more money per student at the higher levels of education, the students from higher socioeconomic groups, who are better represented at these levels of education, are likely to benefit more from public exchequer.

Table 15

Pakistan's Consolidated Federal and Provincial Government Expenditure Per Pupil, by Level of Education at Market Prices of 1980-81

(Rupees)

Year	Primary	Secondary	College	University
1981-82	308	471	1,697	12,519
1982-83	294	526	1,876	11,817
1983-84	300	548	1,791	12,214
1984-85	363	734	2,100	13,132
1985-86	403	788	2,090	14,198
1986-87	445	792	2,560	19,392
1987-88	450	993	2,610	23,330
1988-89	436	1030	2,910	28,971
1989-90	446	1142	2,911	36,789

Source: Calculations based on Pakistan (1990, 1993).

Mass illiteracy and pattern of drop-out rates across various levels of education adds one more dimension to the inequitable distribution of educational subsidies. A vast majority of people who never go to school, receive nothing from these subsidies. According to Khan *et al.* (1987), a significant percentage of students who enrol at the primary school, drops out between first and second grade.[2] This process continues at the higher levels of education. Hence a small minority who makes it to the highest rung of the educational ladder, ends up accumulating most of the public subsidies for education. The Lorenz curves drawn by Jimenez and Tan (1985) show that the cumulative public educational subsidies in Pakistan are less equitably distributed than in an average developing country. This distribution is slightly more equitable even in African countries.

The method of financing public expenditures on education also does not seem to be in conformity with equity considerations. These expenditures are normally financed by the general tax revenues. As can be inferred from Table 16, most of the tax revenues of the government of Pakistan come from indirect taxes. Direct taxes, which are generally progressive, constitute less than 20 percent of the total tax revenues most of the time. Malik and Saqib (1985,1989) have studied incidence pattern of federal taxes across various income groups in Pakistan's rural and urban areas. Their main findings are that indirect taxes are generally regressive for both rural and urban areas of the country. The overall tax system is also regressive for the rural areas of Pakistan while it is slightly progressive for the urban areas. Hence the poor households in the rural areas end up paying more for education in terms of taxes needed to finance free public schools. This situation adds to the high level of inequity which already exists both between rural and urban areas and within rural areas.

Table 16

Pakistan's Federal Government Revenues from Direct Taxes and Their Share in Total Tax Revenues and GDP

Fiscal Year	Direct Taxes (Rs Million)	Direct Taxes as % of Total Tax Revenues	Direct Taxes as % of GDP
1981-82	8,882	20.6	2.9
1982-83	9,261	18.9	2.5
1983-84	9,197	17.1	2.2
1984-85	9,730	17.4	2.1
1985-86	10,267	16.3	2.0
1986-87	11,105	13.3	1.9
1987-88	12,441	15.0	1.8
1988-89	14,586	13.2	1.9
1989-90	15,741	13.2	1.8

Source: Pakistan (1993).

[2]This percentage varies from 17.6 to 55.4 depending upon province, region and gender of the students.

5. FREE EDUCATION AND ALLOCATIVE EFFICIENCY

To asses the allocative efficiency of the policy of nominal and more or less flat rates of tuition fees for all levels and all students, we need to refer to the studies of rates of returns to education for Pakistan. Published work on this topic has been done by Hamdani (1977); Haque (1977); Guisinger *et al.* (1984); Khan and Irfan (1985); Psacharopoulos (1985); Jimenez and Tan (1985) and Pasha and Wasti (1989). These studies widely differ in terms of data, methodology and findings. The estimates of the rate of return to education obtained by different authors are also markedly different from one another. While it is reasonable to expect different figures for the rates of return to emerge from data sets which differ in terms of time, geographical region and the population covered, in case of Pakistan, same data set leads different authors to entirely different results. This highlights the sensitivity of these estimates to the methodology used for obtaining them, and hence the need for interpreting them with care.

Despite such vast differences in the magnitude and pattern of various estimates of the rates of return to education, it is still possible to make some broad generalisations. One thing is clear about these estimates. They show a mixed pattern across various levels of education rather than conforming to the "... well-documented declining rate of return pattern by level of education" which is found to be particularly common in the developing countries. The returns to education in Pakistan are also generally lower than those in other developing countries [See Psacharopoulos (1973, 1981, 1985)]. However, most of the studies report a high rate of returns for primary education. Also the mixed pattern of the rate of returns to education contrasts with the per-pupil government expenditure in Pakistan (Table 15) which sharply increases with the level of education. These two facts about the rate of return to education indicate a need for reallocation of resources, especially towards primary education.

The findings of these studies are not particularly supportive of the system of free public education. Since cost of educating a person generally rises with the level of education, by charging zero or same small tuition fee from all students government ends up spending more money per student for higher levels. Since rate of return does not necessarily increase with the level of education, some misallocation of resources occurs.

The studies of the rate of returns to education are not the only type of research that points to some possible misallocation of resources across levels in the education sector of Pakistan. Cohen (1985) used a Labour Force Matrix to project manpower imbalances which would emerge at the end of the sixth five year plan, in 1988. His main prediction was a surplus of labour force participants with higher education and a shortage of those with primary education. This lead him to conclude that the labour

market for lower skills and education would continue to be tighter than that for higher skills and education. A study by the Manpower Division of the Government of Pakistan [Pakistan (1985)] which uses similar methodology, brings home essentially the same message: a need for reallocation of resources towards primary education.

6. SOME CONCLUDING REMARKS

There is broad agreement among economists and other social scientists that education plays a crucial role in the economic development of a country.[3] This view has been further strengthen by some recent research on endogenous growth which has found both theoretical support and empirical evidence in favour of a positive relationship between economic growth and human capital formation.[4]

In the Context of Pakistan, a number of studies have been done to assess the extent and nature of the relationship between education and a large variety of other variables. Butt (1984) has found that five or more years of farmer's education lead to increased farm and labour productivity, reduced use of farm labour, and increased use of yield augmenting inputs like fertiliser. Azhar's (1988) finding that farmer's education results in a significant increase in the farm output by increasing technical efficiency lends further support to the belief that expansion of education in rural areas would help in the development of the agricultural sector. Various causality tests conducted by Khan *et al.* (1991) conclude that literacy Granger-causes productivity in the manufacturing sector. A study of gender wage differential by Ashraf and Ashraf (1993) reveals that a significant percentage of the wage gap between males and females can be explained by the difference in their characteristics including education. The studies of the rates of return to education referred to above give a positive value for the rates of returns to all the levels of education. This means that by investing in education one can increase ones life time earnings.

The influence of education is not limited to the economic domain alone. Association between education and various social and demographic aspects of Pakistani life is also well documented. Khan and Sirageldin (1979) have studied fertility behaviour in Pakistan. They discover that wife's education has a negative effect on completed family size in the rural areas. Husband's education also exerts a negative influence on the completed family size in the rural areas and demand for additional children in urban areas. Sathar (1984) also reports that women with more than primary education have notably lower fertility. She further reports that educated women also marry late, desire and bear fewer children, loose less children through death at earlier ages, and use contraceptives more often than uneducated women.

[3]A review of the evidence related to the impact of primary schooling on economic development can be found in Colclough (1982).

[4]For Pakistan, empirical evidence on forgone growth due to underinvestment in education can be found in Birdsall *et al.* (1993).

Given the overwhelming evidence in support of the benefits of education to the economy and the society, the sorry state of affairs in the educational sector of Pakistan cannot be taken lightly. The problems of mass illiteracy, educational inequality, and inefficiency need to be solved as soon as possible. It seems obvious that the policy of free education through public schools, which has been in effect for decades, has not gone a long way in this direction. This makes a new, carefully targeted approach towards providing and financing education inevitable.

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Comments

The issue author has taken up is the most crucial factor determining the performance of any development strategy, regardless of space and time. It becomes even more crucial in the context of countries like Pakistan who have never effectively addressed the serious problems in dealing with the inadequacies of their public schooling system. Author's approach to the problem appears to be multidimensional and quite a good amount of effort has been invested in this work.

What are the major findings of this study and what significance do they hold for policy-making to improve the situation of public schooling in Pakistan? A close read of the paper suggests following improvements regarding consistent articulation of the arguments.

1. First and foremost, there was supposed to be a dominant MORAL of such kind of work derived simultaneously from two mutually reinforcing focuses, politics and economics. The author should have included the political dimension with categorical position that if Pakistan is to develop a sustainable democratic culture and tradition, her politicians must do some serious heart searching regarding one of the most fundamental democratic rights of their electorate, universal literacy through the adequate provision of free public schooling. As far economics, the bureaucrats and technocrats of Pakistan ought to have been strongly advised to carefully and pragmatically weigh the long run opportunity cost of different alternatives while allocating tax payers money, most of it sweat drenched. But, on the contrary, author's fairly detailed extrapolation of government expenditure in Pakistan appears to be an apologetic interpretation of the socially decadent and economically unsustainable status quo. The reader scarcely finds anything critical or suggestive regarding the reshuffling of government expenditures to provide adequately for free public schooling. Every student of economics appreciates the resource constraint. That said, the claims on scarce resources are never divine and must be settled against the consideration of the sustenance of civil society. Adequate provisions for free public schooling ought to be listed amongst top priorities of a nation because, rights of the individual apart, school is an interface between the family and civil society, between the private and public spheres. No doubt the payoffs of such a strategy are in the long run. But what needs to be followed is the story of the man asking his gardener how long it would take for a certain seed to grow into a tree. The gardener

replied it would take 100 years. To which the man's decisive response was, "Then plant the seed this morning. There is no time to loose".

2. Given that in recent years each successive government in Pakistan appears to be fanatically implementing the liberal policy advise of Bretton Woods Institutions (BWIs), the International Monetary Fund (IMF) and the World Bank, in almost all spheres of economy, author ought to have vociferously advised the state authorities for paying some heed to the recommendations of liberal philosophers in the realm of education too. The Scot intellectuals Adam Smith, James Mill, Thomas Macaulay, Thomas Malthus, W. T. Thornton, and John Stuart Mill were responsible for developing the case for state intervention in education. Adam Smith, the prophet of BWIs market theology, was the first to present systematically the case for state responsibility for compulsory education of all the citizen.[1] It must not be forgotten that since the 19th century, and in some countries earlier, the major driving force for popular education was the intervention by the state to provide free tax-supported schools and to enforce legislation compelling parents to send their children to them. In 1524 Martin Luther sent a letter to German municipalities insisting it was their duty to provide schools, and the duty of the parents to educate their children.[2] Author, on the contrary, is suggesting that "providing free education to such a large population as Pakistan's is a formidable".
3. Author's conclusion that the policy of free education through public schools has not gone a long way to solve the problem of mass literacy overlooks the major factor responsible for this failure: the inadequate legislative structure for school education. In 1918 the British authorities introduced in India the laws regarding compulsory education, but these laws were only enabling legislation, modelled after an 1871 act of the British Parliament, superseded a decade later by a parliamentary act requiring local authorities to make education compulsory. The latter legislation was never introduced by the British in India. These laws remain in force today in Pakistan. It should be noted that all these laws permit but do not require local authorities to make education compulsory.[3]

[1]See Adam Smith *The Wealth of Nations.* New York: Modern Library, 1937.

[2]See Graff Harvey (ed.) *Literacy and Social Development in the West: A Reader.* Cambridge: Cambridge University Press, 1981.

[3]The existing law relating to primary education in Pakistan has been consolidated under the Provincial Primary Education Ordinance, 1962. This Ordinance gives the provincial government the power to introduce compulsory primary education in any district. In such an area, the parent of a child is to enrol the child in a recognised school until the child has completed eight years of schooling. But this is only an enabling legislation, and does not imply compulsory primary education as a social obligation of state. In brief, the provincial government can, but do not have to, introduce compulsory primary education. See Article 37(b), Section 18, The Constitution.

4. Author has mentioned the opportunity cost being most likely to affect the parents' decision to let their children attend the school. But dismal record of achievements on literacy front warrants that state in Pakistan introduces the principal of compulsory education. Children could continue to help at home, work in fields, even be employed in factories, but for part of the day they must attend school. Further, opportunity cost is not the only consideration influencing poor parents' decision of their children's formal education. Provisions, both physical and, most importantly, in terms of educational quality, are so hopeless in many of the public schools that parents rightly consider it a waste of time. In many cases, poor people living in shanty towns and city peripheries are compelled to send their children to private schools because of poorly performing and, in some situations, even non-performing public schools. Indeed, the suggestion that people at the lower end of social strata are generally reluctant for educating their children, particularly girls, is fraught with serious errors and omissions.
5. Almost every other study on formal education in Pakistan blows the issue of gender discrimination out of proportion. It might have been justified, even warranted, in the past. Presently, girls enrolled at most institutions of higher learning in Pakistan are outnumbering boys by alarming margins. Gender inequality at school level, which author emphasises on the basis of, at least, six years old information, may still exist in some rural areas. But extrapolation of composite figures listed in Pakistan Economic Survey for 1997-98 tells a quite different story: in six years to 1996, percentage increase in male:female primary and middle schools was 3:9 and 32:30 respectively; the percentage increase in enrolment at these levels was 52:43 and 27:32 respectively; increase in girls' enrolment in high schools was also more than that of boys, 41 percent and 40 percent respectively. These estimates do not endorse author's unverified[4] discriminatory drop out rates 'thesis'.[5]
6. In Pakistan, asymmetry of tax burden and benefits is quite significant for all type of public expenditures. Although author has rightly made the point regarding the 'statutory' tax structure of Pakistan, its insertion *per se* appears to be lopsided: composite expenditure on education constitute, unfortunately, only a small part of the total and author's main focus is supposed to be public schooling rather than education as a whole. Further, given that mostly children of the poor go to public schools, especially after

[4]Author's argument is based on quoting continuation rates from a study by Mahmood and Zahid which utilises early 1980s data.

[5]The argument does not imply, however, that gender discrimination in education is no longer a serious issue to be considered for development strategy of Pakistan. The point is that, for meaningful results, emphasis must be micro and area specific.

the reintroduction of private sector in schooling, and in rural areas only public schooling is provided, the findings of Lorenz curves by Jimenez and Tan may not hold out if subsidies for school education are considered separately.

7. Allocative efficiency is the central problem confronting alternative public policy choices. Although author has included this important dimension in his work, it is not possible to ascertain anything out of the information provided: four of the seven studies quoted by author have only reported private rate of return to education, and findings of three studies reporting social rate of return are not mutually consistent.
8. This work reports some comparisons with other developing countries, but their significance is not clear. Nowhere the question is addressed that what forces have propelled a higher commitment to public schooling in many other developing countries? Are they the same or similar to those that affected the developed countries?

And in what way do they differ from the forces at work, or not at work, in Pakistan. Finally, author has scarcely given us any of his own finding. In its present form, this work could at best be rated a research report based on literature survey.

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