Education in Selected Islamic Countries: A Comparative Analysis

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I. INTRODUCTION

Five major issues can be identified in the field of education in most developing countries. These are (1) Illiteracy, (2) Inefficiencies within the school system which affect school output and the quality of education; (3) the output of the educational system does not match with the requirements of the type of skilled manpower required by the economy; (4) the management of educational systems has become more complex given the growth of knowledge; and (5) resources available for educational purposes are insufficient.

This paper, which is a preliminary study, attempts to undertake a comparative analysis of the state of education in selected Islamic countries with particular reference to Pakistan in the light of some of the issues mentioned above.\(^1\) The objective is not only to gather data on major educational variables in these countries but also to see the relative standing of Pakistan with respect to these countries in the educational field. The first two issues will form the focus of our study and the last issue which deals with resource availability for education will be discussed in the context of public expenditure on education.

The inefficiencies within the school system can be examined, to some extent, by looking at enrollment ratios, teacher-pupil ratios and drop-out/repeater rates. The data on the latter are available only for repeater rates and that, too, only for the first level of education. Therefore, we have been constrained to restrict our analysis

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¹Although religion is a common factor among these countries and it would have been interesting to have examined the traditional system of education vis-a-vis the radical system, this however does not fall within the purview of our paper as it forms a substantial subject of research in its own right.

to examining enrollment ratios and pupil-teacher ratios. We, however, are not establishing any norms but only to observe how these selected countries are performing within the already established conditions prevailing in these countries.

This paper looks at the status of literacy, enrollment ratios for various levels of education, i.e., primary, secondary and tertiary as well as by sex; pupil-teacher ratios, also by level of education; public expenditure on education by level of education; and also to provide some estimates on per student cost borne by the public exchequer for the three levels of education. Thus, the paper may be divided into six major sections: an introduction, a second looking at the literacy rates; a third dealing with enrollment ratios, a fourth discussing pupil-teacher ratios; a fifth that examines public expenditure on education by level and per person. The sixth, and concluding section, will sum up the discussion of the paper. The data analysed are from various issues of the statistical yearbook published by the United Nations Educational, Scientific and Cultural Organization (UNESCO). The period covered is from 1979 to 1987. The countries included in the analysis are Algeria, Egypt, Libyan Arab Jamahiriya, Nigeria, Sudan, Uganda, Afghanistan, Bangladesh, Indonesia, Islamic Republic of Iran, Iraq, Malaysia, Pakistan, Saudi Arabia, Syrian Arab Republic and Turkey. Although it may have been useful to consider a smaller group of countries, the choice of this sample was determined by looking at some major countries in the different geographic regions of the world. Thus, for example, Indonesia and Malaysia represented South East Asia, Pakistan, Afghanistan, Iran, South-West Asia; Egypt and Sudan, North Africa, Saudi Arabia, Iraq and the Syrian Arab Republic, the Middle East and so on and so forth.

II. LITERACY RATES

It goes without saying that high literacy rates are a pre-requisite for development. However, it is a fact that many, if not all, the developing countries have substantial proportions of their population which are illiterate. In our selected sample three countries have low levels of literacy. These are Afghanistan, (80 percent) Bangladesh (74 percent) and Pakistan (73.8 percent). Turkey has the lowest number of illiterates (31.2 percent) followed by Indonesia (32.7 percent). If one were to look at the sex-wise breakdown, then women are extremely disadvantaged. Afghanistan, Bangladesh, Libya, Pakistan and Syria have the largest percentage of females who are illiterate (94.2, 86.8, 85.2, 84.8 and 80 percent respectively). Libyan data are for the period before President Qadaffi took over and as the data have not been updated one cannot state as to how far illiteracy has dropped in Libya over the last ten years. Only Indonesia and Turkey have relatively low (in the 40 percent range) female illiterates. For six countries, Nigeria, Sudan, Uganda, Malaysia, Iraq and Saudi Arabia, literacy data were not available.

III. ENROLLMENT RATIOS

Between 1960 and 1975 UNESCO observed that in the less developed countries enrollment ratios for the primary level of education i.e., for age group 6-11, were below 65 percent; for the secondary level of education (age group 12-17) the ratio was 38 percent and for the third or tertiary level, (age group 18-23) the enrollment ratio was 9 percent. Based on these figures UNESCO made some projections for 1985. The assumption was that the less developed countries were expected to improve on the state of education. Given this assumption, then these countries according to UNESCO would have to raise their enrollment ratios to 68 percent for the age group 6-11 years (primary), 42 percent for the age group 12-17 years (secondary) and 12 percent for the age group 18-23 years (tertiary).

At the primary level of education four countries are prominent in not achieving the projected enrollment ratio as estimated by UNESCO. These countries include Sudan, Afghanistan, Bangladesh and Pakistan. The enrollment ratio in Sudan barely reached 50 percent for the period 1979–1985, well below the 68 percent as projected by UNESCO. Similarly for Bangladesh, enrollment ratios were about 60 percent for the 1970–1987 period, below the target figure of 68 percent as projected by UNESCO. Pakistan's performance was pathetic. The enrollment ratio declined from 53 percent in 1979 to 44 percent in 1986 — much below the required 68 percent. Afghanistan also registered a decline which may be attributed to the disturbed conditions in that country due to foreign invasion (from 35 percent in 1981 to 18 percent in 1986).

At the secondary level of education the projected enrollment ratio to be achieved by 1985 was 42 percent as estimated by UNESCO. It is clear from the data examined that only Algeria, Egypt, Iran, Iraq, Malaysia, Syria and Turkey achieved the target. Indonesia and Saudi Arabia also barely made it, particularly toward the latter part of the period i.e., in 1985 and 1986. Of the remaining countries, Afghanistan and Uganda (for the years which data are available) performed most poorly. Pakistan and Bangladesh did somewhat better but were still far behind the projected enrollment ratio for this level.

At the third, or tertiary level, only three countries met the UNESCO projection for 1985. These are Egypt, Saudi Arabia and Syria. Iraq came near to the projected target. Of the remaining countries Uganda performed the worst. Pakistan performed quite well but did not achieve the target rate.

When examining the breakdown of the enrollment ratios by sex over time for the primary and secondary levels of education for selected Islamic countries it is clear that enrollment ratios by sex have increased in most countries. The female enrollment ratio at the primary level has gone up substantially in Nigeria, Saudi Arabia, Afghanistan, Indonesia, Iran, Iraq and Uganda 80 percent, 51 percent, 50 percent, 49 percent, 51 percent, 42 percent and 43 percent. A less substantial in-

crease has occurred in the case of Algeria (13 percent), Turkey (16 percent) and Malaysia (13 percent). A moderate increase in the enrollment ratio for females has taken place in the case of the Syrian Arab Republic (35 percent), Pakistan (28 percent) and Egypt (28 percent). In one case, the enrollment ratio has actually declined, i.e., Bangladesh which showed a 4 percent decrease in females enrolled at the primary level for the period 1975—1987.

At the secondary level the countries that performed well in increasing female enrollment are: Algeria (221 percent), Saudi Arabia (133 percent), Indonesia (127 percent), Afghanistan (100 percent), Sudan (112 percent) and Iraq (86 percent). Moderate increases were posted by Syria (75 percent) Egypt (74 percent) and Turkey (74 percent). The lowest increase was in the case of Iran (15 percent). Pakistan (43 percent) and Bangladesh (37 percent) showed a less than moderate increase in the female enrollment ratio at the secondary level.

IV. PUPIL-TEACHER RATIOS

The pupil-teacher ratio is an important variable in determining the quality of education. The conventional wisdom is that the lower the pupil-teacher ratio the better the quality of education; smaller classes have an edge over large classes. Various studies have been conducted to support this point of view [Hubbard (1963); National Education Association (1969); Sproule (1971)]. These studies mostly give the teacher's point of view about class size stating that small classes are more manageable and that students learn more. However, there is an equally large opposing point of view which states that a larger class size is more beneficial for student achievement for example, Madden (1968); Church (1971); Little, Mabey and Russell (1971); Flinker (1972); Farrell and Schiefelbein (1974). There is a third point of view which states that class size does not matter: [Marklund (1962); Johnson and Sriver (1967); Bieker (1970)]. Given these three conflicting points of view nothing concrete can be said about pupil-teacher ratios. What is generally evident from the data is that class size is larger at the primary level, is somewhat smaller at the secondary level and smaller still at the tertiary or university level. This can be explained by the fact that education imparted at the primary level is more general; for example reading and writing skills; basic arithmetic etc., where larger class sizes help in a way to disseminate knowledge. At the secondary level, education becomes more skill intensive with the number of subjects reduced whereas at the university level, given the in-depth nature of study, the smaller the class the more effective the learning process.

V. PUBLIC EXPENDITURE ON EDUCATION

This section of the paper gives a brief review on the public current expenditure

on education percentage wise in terms of GNP and Total Government Expenditure (TGE) in selected Islamic countries for the period 1979–1986. The percentage figures are given in terms of GNP and total government expenditure (TGE). If one looks at figures in terms of GNP, then Algeria followed by Malaysia, Saudi Arabia and Syria spend relatively more of their GNP than do the other countries. At the lower end of the spectrum are countries like Uganda, Afghanistan, Bangladesh, Indonesia, Turkey and Pakistan. In terms of total government expenditure (TGE) Malaysia, Algeria and Iran are among the leaders followed closely by Syria and Saudi Arabia. Libya also spends a large portion of its national budget on education. Pakistan, on the other hand, devotes a low proportion of its national budget to education.

If one compares expenditures over time, then Egypt, Libya, Bangladesh, Indonesia, Malaysia, Pakistan, Saudi Arabia, and Syria have increased their public expenditure on education as a percentage of GNP (by 38 percent, 74 percent, 40 percent, 38 percent, 37 percent, 5 percent, 66 percent and 35 percent respectively) as well as of total government expenditure 28 percent, 53 percent, 50 percent, 2 percent, 15 percent, 9 percent, 10 percent and 39 percent respectively. It should be noted that Pakistan had the lowest increase in expenditure on education as part of the GNP (5 percent). As a percentage of total government expenditure, education outlays increased 9 percent over the period for Pakistan. In the case of Algeria and Nigeria expenditure on education as a percentage of GNP (22 percent and 54 percent respectively) and total government expenditure (42 percent and 26 percent respectively) decreased substantially. This may be due to the fact that their revenues from oil had declined substantially and, hence, they had to curtail their public expenditures. In the case of Uganda and Afghanistan, for the years for which data are available, the public expenditure on education as part of total government expenditure also declined appreciably (24 percent and 55 percent respectively). This may be due to the unsettled conditions in the two countries (civil war in Uganda and foreign intervention in Afghanistan).

An elementary exercise was carried out to estimate public expenditure per capita by level of education for the selected Islamic countries. Thus, in 1980 Algeria spend 23 times more on tertiary education than on primary education. This is on a per capita basis. Similarly, other countries spent more on tertiary education as compared to what was incurred at the primary level. For Nigeria it was 118 times; for Uganda 238 times; for Afghanistan 10 times; for Bangladesh 4 time; for Iran 9 times; for Iraq 12 times; for Pakistan 50 times; for Syria 107 times and for Turkey 8 times. The only exception is Malaysia where the expenditure at the primary and tertiary levels per person was the same. Bangladesh can be considered to be doing the next best in that expenditure between the primary and tertiary levels was only 4 times. The three countries that fared worst are Uganda, Nigeria and Syria. The

next worst was Pakistan where expenditure per person at the tertiary level was 50 times than that at the primary level.

Two facts emerge from the above analysis. The first is that more is spent by practically all countries on higher education as compared to primary education. The former is more expenditure intensive than the latter. The second fact is that there is a wide divergence between what is spent on higher education as compared to primary education. This can give rise to social inequalities. It goes without saying that a sound footing at the primary level of education does not only democratise the educational system but also helps in reducing inequalities within the system. Therefore, if one part of the educational system, for example, the tertiary level, receives and spends more, then the other levels suffer due to resource constraints. This indirectly affects coverage at the primary and secondary level. Thus, owing to insufficient resources, a lower number of students are enrolled than would otherwise have been the case.

Besides, the findings of economic research show that social and private rates of return are highest to primary education even if secondary benefits derived from primary education are excluded on the grounds that they are difficult to quantify.

VI. CONCLUSIONS

It is clear that literacy is a major problem in some of the selected Islamic countries which we have looked at. For Pakistan the problem is more severe because, after 42 years independence, we have a literacy rate of around 26 percent. If we look at the literacy rates for women who comprise half of the population the picture is even more pathetic - almost 85 percent are illiterate. In rural areas this figure increases to 93 percent approximately [Government of Pakistan, (1988)]. This is despite the fact that attempts have been made to raise the rate of literacy. Two recent attempts may be enumerated. These are the Iqra Pilot Project and the Nai Roshani Schools. These schemes were initiated because of the inadequacies in the formal system of primary education which resulted in high drop-out rates due to lack of motivation, poor teaching and high opportunity costs. However, it should be noted that the various attempts that have been made to tackle the low literacy rates in Pakistan have been half-hearted and suffered from discontinuities in their implementation. In other words, every new government that takes over introduces its own programmes which last only as long as the government lasts. This results in a wastage of public sector allocations which, are already insufficient, to the primary level. It is important that a continuity be maintained, particularly at the primary education level, so that the rate of literacy can increase.

Low enrollment ratios may be caused by economic factors such as high opportunity costs of school age children, long travel distances to reach schools; social factors such as unattractive atmosphere in schools, and an unusually low demand in

rural areas, but it certainly is a serious problem which is affecting adversely the efficiency of the education system in various Islamic countries, especially Pakistan. Given the conflicting views in the literature on class size and student achievements, nothing can definitely be said about pupil-teacher ratios and ideal class sizes. This area is rich for further research and it is not necessarily true that a priori class sizes have to be same in each country. Class sizes may well be dependent on the cultural and social ethos prevalent in each country.

The size of the education budget can tell us how much priority a government gives to this sector as compared to other sectors of the economy. Allocations within the sub-sectors of education reveal the preferences of the governments for one level of education vis-a-vis other levels. The findings of the study show that budget allocations in Pakistan, for the education sector, are among the lowest in the selected Islamic countries. It should be noted that even Bangladesh spends more as a percentage of total government expenditure than does Pakistan on education. If one examines the allocations for each sub-sector of education there is also a serious imbalance, especially in four countries: Uganda, Nigeria, Syria and Pakistan. Hence, there is a need that a policy change be brought about. Recent indications, especially in Pakistan, reflect a shift in favour of primary education. But this is not a sufficient condition. This shift should be effectively implemented if it is to succeed. It is sad to conclude, therefore, that much remains to be done in the field of education in most of the selected Islamic countries that we have looked at if they are to meet the challenges of the 21st century. This poor performance in education is even more upsetting because Islam, as a religion, preaches the acquisition of knowledge as a primary goal for homo sapiens.

Appendix

Appendix Table 1

Number of Illiterates in Selected Islamic Countries

Constant	Vear	Total	Male	Female	ш	Percentage	0
Country	1				Total	M	ഥ
Algeria	1982	5880350	2297347	3583003	55.3	42.7	68.3
Egypt	1976	13317501	5051502	8265999	61.8	46.4	77.6
Libya	1973	090809	200813	407237	61.0	38.7	85.2
Afghanistan	1980	5742292	2488299	3253993	80.0	8.99	94.2
Bangladesh	1974	27531843	12228895	15302948	74.2	62.7	8.98
Indonesia	1980	28325026	9490915	18834111	32.7	22.5	42.3
Islamic Republic of Iran	1976	11733299	4875377	6857922	63.5	51.8	75.6
Pakistan	1981	33597018	15511984	18085034	73.8	64.0	84.8
Syrian Arab Republic	1970	1851949	629904	1222045	0.09	40.4	80.0
Turkey	1980	9901000	2749000	7152000	31.2	16.8	9.94
	1						

Enrollment Ratios by Level of Education (Gross) for Selected Islamic Countries Appendix Table 2

,	1979	1979 1980 1981		1982	1983	1984	1982 1983 1984 1985 1986	1986	1987
Algeria									
First Level	95	95	94	93	94	94	94	95	I
Second Level	31	33	İ	1	43	47	51	54	I
Third Level	4.4	4.9	1		5.7	5.8	9.9	7.4	1
Egypt									
First Level	75	9/	78	82	84	98	87	ı	1
Second Level	20	52	54	57	59	09	99	1	i
Third Level	14.8	14.7	14.7	19.9	21.0	21.7	21.2	I	i
Libyan Arab Jamarihiya									e.
First Level	1	1	1	I	ł	ı	I	ı	l
Second Level	ı	1	ı	1	i	I	ı	I	1
Third Level	6.4	8.2	i	10.8	ı	1.	10.6	I	ŀ
Nigeria									
First Level	86	6	86	26	92	ľ	l		1
Second Level	16	19	22	28	53	l	ı	I	1
Third Level	1.8	2.2	2.5	2.7	2.8	I	ı	1	1

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Sudan First Level 51 52 50 49 49 50 – Second Level 16 16 18 18 19 19 50 – Uganda First Level 50 51 54 60 – <		1979	1980	1981	1982	1983	1984	1985	1986	1987
Level 51 51 52 50 49 49 50 — Level 16 16 18 18 19 19 20 — Level 17 1.8 2.0 2.1 2.0 2.0 2.0 — Level 5 5 5 8 — — — — — — — Level 0.6 0.5 0.6 0.6 — — — — — — Level 0.6 0.5 0.6 0.6 — — — — — — Level 10 10 12 7 — 8 8 6 Level 1.7 — — 1.4 — — — — 1.4 h evel 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Sudan									
Level 16 16 18 18 19 19 20 — Level 1.7 1.8 2.0 2.1 2.0 2.0 2.0 — evel 5 5 8 — — — — — I Level 0.6 0.5 0.6 0.6 — — — — — am cvel 0.6 0.6 0.6 —	First Level	51	51	52	20	49	49	50	1	ı
Level 1.7 1.8 2.0 2.1 2.0 <th< td=""><td>Second Level</td><td>16</td><td>16</td><td>18</td><td>18</td><td>19</td><td>19</td><td>20</td><td>1</td><td>1</td></th<>	Second Level	16	16	18	18	19	19	20	1	1
evel 50 51 54 60 -<	Third Level	1.7	1,8	2.0	2.1	2.0	2.0	2.0	I	,
evel 50 51 54 60 -<	Uganda									
Level 5	First Level	50	51	54	09	ſ	ı	1	ı	1
Level 0.6 0.5 0.6 0.6 0.7 0.8 — an an an an an an an an evel 28 34 35 13 — 16 18 18 18 I Level 10 10 12 7 — 8 6 6 Level 1.7 — — 1.4 — 8 6 6 Level 1.7 — — 1.4 — 8 6 6 Evel 1.7 — — 1.4 — — 1.4 Instead —	Second Level	S	\$	5	∞	I	i	1	t	1
an 28 34 35 13 — 16 18 18 18 I Level 10 10 12 7 — 8 8 6 Level 1.7 — — 1.4 — 8 8 6 Level 1.7 — — 1.4 — 8 8 6 Level 1.7 1.4 — 8 8 6 6 Level — 6.1 6.0 6.2 6.0 60 60 Level — 15 15 — 4.9 5.0 4.9 Evel 107 112 117 120 116 118 118 Level 24 28 30 33 37 39 42 41	Third Level	9.0	0.5	9.0	9.0	I	0.7	8.0	I	. 1
kevel 28 34 35 13 - 16 18 18 Level 10 10 12 7 - 8 8 6 Level 1.7 - - 1.4 - - - 1.4 h - - - - - - - 1.4 h - - - - - - - 1.4 h -	Afghanistan									
Level	First Level	28	34	35	13	1	16	18	18	1
Level 1.7 — </td <td>Second Level</td> <td>10</td> <td>10</td> <td>12</td> <td>7</td> <td>i</td> <td>∞</td> <td>∞</td> <td>9</td> <td>ļ</td>	Second Level	10	10	12	7	i	∞	∞	9	ļ
avel - 63 62 61 60 62 60 60 I Level - 15 15 - - 19 18 18 Level - 3.0 2.9 3.5 - 4.9 5.0 4.9 evel 107 112 117 120 116 118 118 118 I Level 24 28 30 33 37 39 42 41	Third Level	1.7	1	ı	1.4	ı	Î	1	1.4	ı
evel – 63 62 61 60 62 60 60 I Level – 15 15 – – 19 18 18 Level – 3.0 2.9 3.5 – 4.9 5.0 4.9 evel 107 112 117 120 116 118 118 I Level 24 28 30 33 37 39 42 41	Bangladesh									
Level - 15 15 - - 19 18 18 Level - 3.0 2.9 3.5 - 4.9 5.0 4.9 evel 107 112 117 120 116 118 118 118 Level 24 28 30 33 37 39 42 41	First Level	I	63	62	61	09	62	09	09	55
Level - 3.0 2.9 3.5 - 4.9 5.0 4.9 evel 107 112 117 120 116 118 118 118 Level 24 28 30 33 37 39 42 41	Second Level	ı	15	15	i	ı	19	18	18	18
evel 107 112 117 120 116 118 118 118 118 118 118 118 118 118	Third Level	1	3.0	2.9	3.5	I	4.9	5.0	4.9	1
107 112 117 120 116 118 118 118 24 28 30 33 37 39 42 41	Indonesia									
24 28 30 33 37 39 42 41	First Level	107	112	117	120	116	118	118	118	1
	Second Level	24	28	30	33	37	39	42	41	I

Appendix Table 2 — (<i>Conti</i>	nued)
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Third Level	1	1.	3.9	4.1	5.6	6.5	ı	1	ı
Islamic Republic of Iran									
First Level	, 1	88	95	26	102	107	112	117	I
Second Level	1	ŀ	4	40	4	43	46	47	1
Third Level	. 1	I	I	3.7	3.9	4.4	4.7	5.1	ı
Iraq									
First Level	120	116	113	109	104	102	100	66	I
Second Level	99	57	59	55	53	54	55	52	ı
Third Level	9.1	9.4	6.6	10.1	10.0	1	ı	ı	ı
Malaysia									
First Level	1	92	95	92	92	76	66	101	101
Second Level	1	51	53	55	49	53	53	54	89
Third Level	ı	4,1	4.6	I	I	5.1	0.9	ł	1.
Pakistan									
First Level	53	43	4	1	45	47	47	4	1
Second Level	1	14	4	ı	16	17	16	18	ı
Third Level	2.0	1	ì	ı	4.1	4.6	5.1	5.1	1
Saudi Arabia									
First Level	62	64	<i>L</i> 9	ı	<i>L</i> 9	69	69	71	I
Second Level	30	30	32	ı	35	38	42	4	ı

Appendix Table 2 — (Continued)

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Third Level	7.0	7.8	8.7	1	9.8	11.1	11.8	13.4	Î
Syrian Arab Republic									
First Level	66	100	101	101	105	107	108	111	I
Second Level	46	46	48	51	99	29	61	09	I
Third Level	15.0	16,6	16.1		16.4	16.8	17.4	I	1
Turkey									
First Level	104	101	102	l	111	113	116	1117	I
Second Level	37	ţ	38	39	38	41	45	4	1
Third Level	6.2	5.2	5.2	5.9	7.4	8.9	9.8	10.2	ľ

Appendix Table 3

Change Over Time in the Male/Female Enrollment Ratio at the Primary and Secondary. Level

		Primary Level	Secondary Level
1. Algeria (1975-76)	M	4%↓	138% ↑
	F	13% ↑	221% ↑
2. Egypt (1975-85)	. M	8% ↑	40% †
	F	∙ 28% ↑	74% ↑
3. Libya (N.A)			
4. Sudan (1975-85)	M	No Change	21% ↑
, ,	F	20% ↑	112% ↑
5. Nigeria (1975-83)	M	67% ↑	N. A.
• , ,	F	80% ↑	
6. Uganda (1975-82)	M	24% ↑	N. A.
	F	43% †	
7. Indonesia (1975-86)	M	29% ↑	80% ↑
	F	49% ↑	127% ↑
8. Afghanistan (1975-86)	M	44% ↑	31% ↑
	F	50% ↑	100% ↑
9. Bangladesh (1975-87)	M	28%↓	17%↓
	F	4%↓	37% ↑
10. Iran (1975-86)	M	11%↑	2%↓
	F	51%↑	15% ↑
11. Iraq (1975-86)	M	12%↓	35% ↑
	F	42% †	86% ↑
12. Malaysia (197587)	M	10% †	23% ↑
, , ,	F	13% ↑	51%↑
13. Pakistan (1975-86)	M	2%↓	14% ↑
` ,	F	28% ↑	43%↑
14. Saudi Arabia (1975-86)	M	8% ↑	86% ↑
, , , , , , , , , , , , , , , , , , ,	F	51% †	133% ↑
15. Syrian Arab Republic	M	4% ↑	26% ↑
(1975–86)	F	35% ↑	75% ↑
16. Turkey (1975-86)	M	3% ↑	40% ↑
• \	F	16% ↑	74% ↑

Appendix Table 4

Pupil-Teacher Ratio by Level of Education in Selected Islamic Countries

Algeria (i) First Level 36 (ii) Second Level 25								
		34	32	31	30	28	27	ı
	25	24	I	23	23	22	1	i
		∞	1	∞	10	11	13	ı
Egypt								
(i) First Level 32		34	31	32	1	32	ı	1
(ii) Second Level 23	24	24	23	23	I	ı	t	ı
(iii) Third Level	ı	I	24	26	ı	28	I	ı
Libyan Arab Jamahiriya								
(i) First Level 20		İ	17	ı	ŀ	19	1	ī
(ii) Second Level 14	12	i	11	ı	I	ŀ	ı	1
(iii) Third Level —	į	1	ı	1	ŀ	ı	ı	1
Nigeria								
(i) First Level –	37	37	38	40	1	ŀ	1	1
(ii) Second Level -	29	32	31	36	ı	ı	ł	ı
(iii) Third Level —	41	12	ı	I	ı	1	ł	l

Appendix Table 4 – (Continued)

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Sudan									
(i) First Level	34	34	33	34	33	34	35	i	ł
(ii) Second Level	21	70	23	22	25	27	24	ı	i
(iii) Third Level	4	23	I	30	24	17	17	1	Į.
Uganda									
(i) First Level	34	34	35	36	. 1	1	ı	1	ı
(ii) Second Level	21	ı	22	21	i	ı	1	1	ı
(iii) Third Level	ı	1	12	11	t	1	ı	ı	. 1
Afghanistan									
(i) First Level	28	32	32	30	ł	37.	37	37	1
(ii) Second Level	22	18	1	1	1	ł	1	i	ı
(iii) Third Level	16	I	I	11	l	ļ	1	1	ı
Bangladesh									
(i) First Level	ı	54	I	ı	I	47	47	48	48
(ii) Second Level	22	24	1	ı	1	56	1	ı	ŀ
(iii) Third Level	19	19	19	20	26	29	28	27	1
Indonesia									
(i) First Level	31	32	32	29	28	56	25	28	1
(ii) Second Level	I	15	1	ı	ı	15	15	ı	I
(iii) Third Level	I	i	6	œ	==	13	ı	ı	. 1

Appendix Table 4 – (Continued)

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Islamic Republic of Iran								-	
(i) First Level	I	1	27	20	20	21	22	24	I
(ii) Second Level	l	I	I	14	14	15	ı	20	ŀ
(iii) Third Level	1	ı	1	ı	14	13	13	11	ı
Iraq									
(i) First Level	28	28	27	24	24	24	24	24	I
(ii) Second Level	30	31	31	28	25	28	78	24	ı
(iii) Third Level	17	16	16	18	18	1	ı	I	I
Malaysia									
(i) First Level	I	27	I	26	26	26	24	23	22
(ii) Second Level	1	23	ł	l	21	23	22	22	22
(iii) Third Level	10	10	15	1	ı	10	11	1	ı
Pakistan									
(i) First Level	45	36	36	ł	39	39	39	39	1
(ii) Second Level	1	17	ı	ı	17	18	I	18	ı
(iii) Third Level	22	1	ļ	ŀ	24	26	24	25	ı
Saudi Arabia									
(i) First Level	18	18	18	17	16	16	16	16	I

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(ii) Second Level	13	13 13 13	13	1	11	12	14	14	1
(iii) Third Level	10	∞	6	I	6	10	9 10 10 11	11	.1
Syrian Arab Republic									
(i) First Level	53	28	28	27	27	27	56	25	ı
(ii) Second Level	18	1	18	17	17	17	16	16	I
(iii) Third Level	ļ	1	ļ	ı	1	1	. 1	ı	1
Turkey									
(i) First Level	28	27	28		31	31	31	31	ı
(ii) Second Level	23	20	20	19	19	ŀ	21	21	ı
(iii) Third Level	13	11	11	13	16	19	20	21	ı

Continued -

Appendix Table 5

Expenditure on Education in Selected Islamic Countries as a Percentage of GNP

	Ø	and of Total Government Expenditure (TGE)	Governme	ent Expend	liture (TG)	E)			
	1979	1980	1981	1982	1983	1984	1985	1986	Change Over Time
1. Algeria									
As Percentage of GNP	7.8	8.2	I	4.5	1	6.0	6.1	6.1	22% ↓
As Percentage of TGE	3 24.9	24.3	ï	1	ı	15.1	15.6	14.6	42% †
2. Egypt									
As Percentage of GNP	0.4	i	4.5	5.5	5,3	5.5	5.5	1	38% ↑
As Percentage of TGE		1	9.4	6.7	6.6	10.6	11.5	ı	28% †
3. Libya Arab Jamahiriya	ę,								
As Percentage of GNP	4.3	3.7	ı	ı	1	6.2	7.5	I	74%↑
As Percentage of TGE		ı	1	1	ŀ	13.6	19.8	20.8	53% 1
4. Nigeria									
As Percentage of GNP	3.9	I	6.5	I	1.9	1.4	1.2	1.8	54% \
As Percentage of TGE	16.2	ł	24.7	I	9.3	11.6	8.7	12.0	76% ↑
5. Sudan									
As Percentage of GNP	1	4.8	1	1	1	I	1	1	

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6. Uganda									
As Percentage of GNP	60	9.0	3.1	1.8	2.7	I	I	ı	200% †
As Percentage of TGE	16.1	11.3	12.3	12.3	1	1	ı	ı	24% ↓
7. Afghanistan									
As Percentage of GNP	1.9	2.0	1	1	ı	I	i	1	5% +
As Percentage of TGE	14.3	12.7	8.8	6.4	ı	1	ı	1	25% 4
8. Bangladesh									
As Percentage of GNP	1.5	1.5	1	i	1.8	1.8	1.9	2.1	40% 1
As Percentage of TGE	7.0	8.2	ı	1	9.8	1	ı	10.5	50% ↑
9. Indonesia									
As Percentage of GNP	1.6	1.9	2.2	I	ı	ı	ı	ı	38% 1
As Percentage of TGE	9.1	8.9	9.3	ı	ı	I	1	ı	2% ↑
10. Islamic Republic of Iran									
As Percentage of GNP	ł	7.2	ŀ	1	3.8	i	ŀ	1	
As Percentage of TGE	1	15.7	1	1	15.5	13.6	17.2	19.5	24%↑
11. Iraq									
As Percentage of GNP	3.2	5.6	I	4.2	4.1	3.9	3.8	ı	19% ↑
As Percentage of TGE	i								

Appendix Table 5 - (Continued)

		20/1	1981	1982	1983	1984	1985	1986	Over Time
12. Malaysia									
As Percentage of GNP	5.7	0.9	ı	7.4	ı	6.1	9.9	7.8	37% +
As Percentage of TGE	19.1	14.7	1	15.7	I	16.1	16.3	ţ	15%↑
13. Pakistan									
As Percentage of GNP	2.0	1.8	1.9	1.9	1.9	2.0	2.1	ı	5% †
As Percentage of TGE	4.6	5.0	5.1	4.9	5.0	l	ı	1	9% ↑
14. Saudi Arabia									
As Percentage of GNP	6.4	5.5	4.9	5.8	6.5	I	9.2	10.6	66% †
As Percentage of TGE	10.2	8.7	8.7	10.0	10.5	ı	11.2	11.2	10%↑
15. Syrian Arab Republic									
As Percentage of GNP	4.9	4.4	5.8	0.9	6.2	6.2	6.4	9.9	35% +
As Percentage of TGE	8.5	8.1	ı	12.2	12.1	11.2	11.8	I	39%↑
16. Turkey									
As Percentage of GNP As Percentage of TGE	1 1	2.8	1 1	i I	3.4	2.6	2.3	2.1	25%†
	As Percentage of GNP As Percentage of TGE Saudi Arabia As Percentage of GNP As Percentage of TGE Syrian Arab Republic As Percentage of TGE As Percentage of GNP As Percentage of TGE Turkey As Percentage of TGE	e of GNP e of TGE e of TGE Republic e of GNP e of TGE e of TGE	e of GNP e of TGE e of TGE Republic e of GNP e of TGE e of TGE	e of GNP 2.0 1.8 e of TGE 4.6 5.0 e of GNP 6.4 5.5 e of TGE 10.2 8.7 Republic e of GNP 4.9 4.4 e of TGE 8.5 8.1 e of TGE - 2.8 e of TGE - 10.5	e of GNP 2.0 1.8 1.9 e of TGE 4.6 5.0 5.1 e of GNP 6.4 5.5 4.9 e of TGE 10.2 8.7 8.7 Republic e of GNP 4.9 4.4 5.8 e of TGE 8.5 8.1 - e of TGE - 10.5 -	e of GNP 2.0 1.8 1.9 1.9 1.9 e of TGE 4.6 5.0 5.1 4.9 1.9 e of TGE 10.2 8.7 8.7 10.0 1 Republic e of GNP 4.9 4.4 5.8 6.0 e of TGE 8.5 8.1 - 12.2 1 e of TGE - 10.5	e of GNP 2.0 1.8 1.9 1.9 1.9 1.9 1.9 e of TGE 4.6 5.0 5.1 4.9 5.0 5.0 e of TGE 10.2 8.7 8.7 10.0 10.5 e of TGE 8.5 8.1 - 12.2 12.1 1 e of TGE - 10.5 8.1 - 3.4 e of TGE - 10.5 3.4 e of TGE - 10.5	e of GNP 2.0 1.8 1.9 1.9 1.9 2.0 e of TGE 4.6 5.0 5.1 4.9 5.0 — e of GNP 6.4 5.5 4.9 5.8 6.5 — 1 Republic e of GNP 4.9 4.4 5.8 6.0 6.2 6.2 e of TGE 8.5 8.1 — 12.2 12.1 11.2 1 e of TGE — 2.8 — — 3.4 2.6 e of TGE — 10.5 — — — 3.4 2.6	e of GNP 2.0 1.8 1.9 1.9 1.9 2.0 2.1 e of TGE 4.6 5.0 5.1 4.9 5.0 - - - - e of TGE 6.4 5.5 4.9 5.8 6.5 - - 9.2 1 e of TGE 10.2 8.7 8.7 10.0 10.5 - 9.2 1 e of TGE 4.9 4.4 5.8 6.0 6.2 6.2 6.4 e of TGE 8.5 8.1 - 12.2 12.1 11.2 11.8 e of TGE - - - 3.4 2.6 2.3 - e of TGE - - - - - - - - e of TGE - - - - - - - - e of TGE - - - - - - - - e of

Appendix Table 6

Public Expenditure Per Student by Level of Education in

Selected Islamic Countries (In U.S. Dollars)

		(In U.S. Dollars)
Country	Level	Public Expenditure per Student
Algeria (1980)	Primary Secondary Tertiary	193.761 518.509 4627.029
Nigeria (1981)	Primary Secondary Tertiary	19.048 219.008 2239.823
Sudan (1985)	Primary Secondary Tertiary	486.918 865.868
Uganda (1982)	Primary Secondary Tertiary	7.018 267.182 1669.109
Afghanistan (1982)	Primary Secondary Tertiary	41.561 101.440 426.218
Bangladesh (1985)	Primary Secondary Tertiary	14.814 30.759 57.156
Iran (1985)	Primary Secondary Tertiary	344.350 636.850 3121.015
Iraq (1984)	Primary Secondary Tertiary	28.677 29.279 335.201
Malaysia (1985)	Primary Secondary Tertiary	2822.847 471.094 2574.596
Pakistan (1985)	Primary Secondary Tertiary	26,5943 49,4239 1333,317
Ѕутіа (1986)	Primary Secondary Tertiary	203.139 310.332 21667.511
Turkey (1986)	Primary Secondary Tertiary	64.678 71.327 501.563

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Comments on "Education in Selected Islamic Countries: A Comparative Analysis"

Education is an important part or sector of a modern economy and an instrument of social change. In the words of [Schultz (1963), p. 3] education means development of a person "morally and mentally so that he is sensitive to individual and social choices and able to act on them; it means to fit him for a calling by systematic instruction; and it means to train, discipline, or form abilities". Thus education as a principle is not only an investment in human capital it is, more importantly, knowledge and skill which liberates human beings from ignorance, superstition and poverty.

The Muslim countries in general, after their independence from colonial rule, have been trying through various educational plans to increase their abysmal literacy rates and growth of general education at various levels.

The paper by Shamim A. Sahibzada and Mir Annice Mahmood is a comparative study of various educational problems of sixteen Muslim countries, the main focus is however on the educational problems of Pakistan.

As these Muslim countries share common religion and culture of Islam the authors, in our opinion, should have added another variable in their analysis (relationship of religion with education). There are many studies available in this important area. The question, inter alia, to probe is: what is the relation of traditional (madrasah) education as well as modern education (school, college, university) to modernization and re-vitalization of a modern Muslim society? For example, Szyliowicz (1973) discusses the relationship between education and modernization in three major Islamic countries of the Middle East: Egypt, Turkey and Iran. He differentiates between a traditional and a radical system of education. A radical education, according to him, aims at structural reorganization of society but a traditional system maintains the status-quo ruled by the elites. He concludes his study with his important suggestion that educational transformation in the Muslim countries must accompany societal transformation without which educational and even economic plans do not materialize.

The paper rightly points out that high literacy rates are a pre-requisite for development. After four decades of independence still three Pakistanis out of four cannot read and write. How can we build an educated and enlightened democracy

and a scientific-industrial culture on such a fragile social base? This is the crucial problem which must be given priority by our development economists and policy-makers. According to the government, the literacy rate is 26.2 percent based on the 1981 Census. UNESCO puts it at 20.7 percent. In urban areas it is 47.1 percent and in rural areas (where about 70 percent of our population lives) it stands at 17.3 percent. It is a mere 1.8 percent for women in Balochistan.

The paper is emphatic on this issue. It is a fact that Muslim societies, or any third-world country, cannot survive in a competitive world of fast developing science and technology. We must divert resources to investment in human capital in an efficient way. Our planners must fix the target of 100 percent literacy in a prescribed time-frame extending non-formal education to all those not covered by the formal school system. A systematic and methodic approach is needed. "In an intellectual environment", says [Hayes (1987), p. 186] in his study on education in Pakistan, "where orthodoxy is prized over free enquiry and expression, there is little incentive for broad-based educational achievement".

The paper does not tell us about the social, economic, and cultural causes which make children drop out from the primary school level. It merely brushes away the problem by saying that it is "due to lack of motivation and poor teaching". This may be one of the reasons. But, our impression is that the main cause is poverty and many children are forced by economic circumstances to supplement the low income of their poor parents. Actually our education lacks direction and purpose. There is an elitist approach to the problem of education. We have model schools for the elites where their children are taught to think, enquire and become leaders of the nation. And there are ill-equipped schools for the masses where children get 'education' loaded with superstitious religion. Our schools thus, to a great extent, reflect the social and economic system which they serve. If substantial inequality of economic opportunity exists in a society, "The educational system is a major vehicle for the transmissison of economic status from one generation to the next", says Bowles (1972).

Public Expenditure on Education

The paper tells us that Pakistan spent only 2 percent of the GNP on education in 1979 and 2.1 percent in 1985. The average percentage of GNP spent on education in the developing countries is said to be 3-5 percent. The paper shows that some Muslim countries (Algeria, Libya, Malaysia, Saudi Arabia and Syria) have achieved higher than 5 percent. It is interesting to compare these figures with other countries. India spends 3.0 percent, Brazil 3.8 percent, USSR 7.6 percent U.S.A. 6.6 percent and UK 6.7 percent.

In spite of the fact that Pakistan has one of the lowest literacy rates in the world and high drop-out rate at the primary level of education, we see that dispro-

portionately more money, resources and facilities have gone to higher education when we compare per capita expenditure on students at various educational levels. This policy weakens the base of our national education.

Some scholars have argued that rapid expansion of higher education increases social mobility of the less privileged classes. But some recent studies show that without substantial social and economic improvements such an emphasis on the expansion of higher education at the cost of primary education produces adverse results and leads to greater inequality in incomes. [Richards and Leonor (1987), p. 143].

The discussion of the authors on per capita expenditure by the Muslim countries at primary, secondary and tertiary levels is highly interesting and revealing. The paper is therefore right in concluding that this lop-sided expenditure on higher education at the cost of primary education will aggravate social inequalities.

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