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T w o

**Total Recorded Educational
Expenditures According to
Level of Education**

CHAPTER THREE

EDUCATIONAL EXPENDITURE IN GENERAL (AT ALL LEVELS OF EDUCATION)

3.1 Introduction

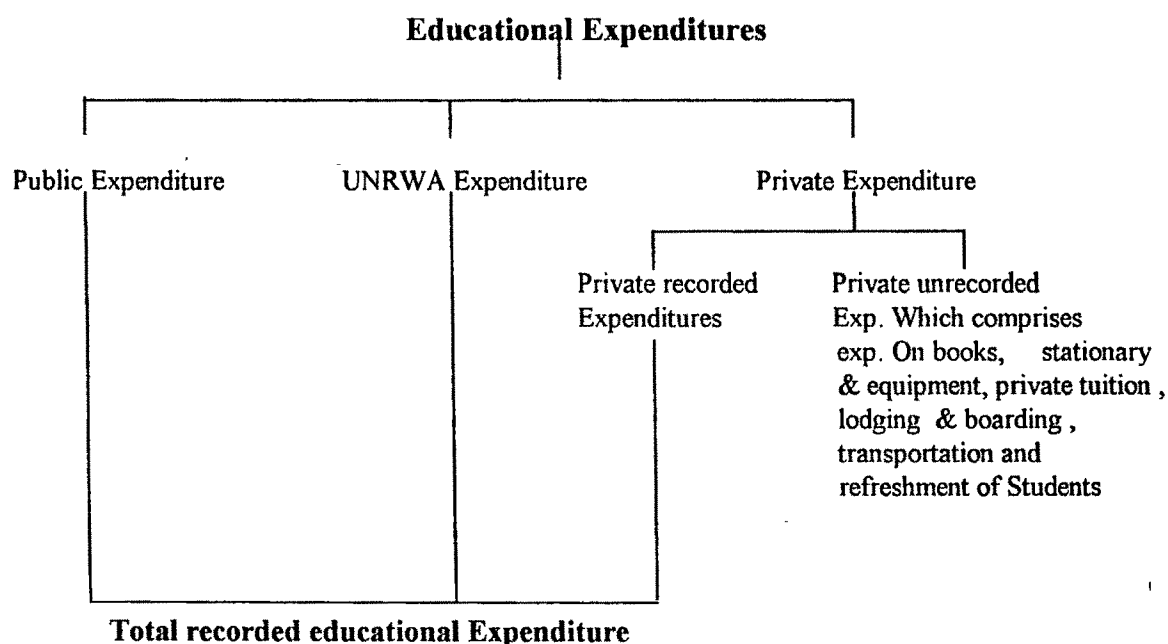
Education in Jordan is financed by government grants, funds and contributions from private individuals and non-government organisations, and loans and aids from international organisations. Of these the largest amount is contributed by the government sources.

The primary responsibility of education funded by the government is with the Ministry of Education (MoE). The Ministry of Higher Education (MoHE), the Vocational and Training Corporation (VTC), public universities and other government ministries, and departments. All these public authorities finance 70.7 percent of the total educational expenditure incurred at all levels of education.

The private institutions provide education at the basic, secondary and higher level of education. The expenditure of these institutions and the private contribution to public institutions accounting for 22.3 percent of total recorded expenditure on education in 1992.

United Nations Relief and Working Agency (UNRWA) provides education at the basic level and provides some vocational education. The proportion of the UNRWA's contribution was around 7 percent of the total educational expenditure in 1992.

Thus, the educational expenditure in Jordan is provided by the government , UNRWA and private sector. It is assumed that all public and UNRWA expenditure is recorded. But not all private expenditure on education is recorded. Public expenditure is defined as the expenditure on education incurred by the various government agencies in Jordan, while UNRWA educational expenditure refers to that expenditure incurred by the UNRWA on these schools which are managed by the UNRWA and provide education to Palestinian refugees living in refugee camps in Jordan. Then, we have the private recorded educational expenditure which comprises expenditure incurred by private persons on fees-tuitions, examinations, hostel fees and by private endowments.



Public, UNRWA and private recorded educational expenditure all together constitute the total recorded educational expenditure in Jordan. The information of total recorded educational expenditure is available in a published form. But even then the limitations of the available data are such that one has constantly to make adjustments on the basis of various assumptions.

The main limitations of the existed data are explained in the following paragraphs :

1. None of the administrative authorities reported separate data on basic and secondary expenditure (except where only basic or secondary education is provided). This is so because many schools provide education at both the levels (i.e Basic and Secondary), even teachers may cross over to teach more than one level. Due to this we have to examine the expenditure at both the levels (i.e Basic and Secondary) of education together for the period of our study.
2. The Ministry of Education (MoE) does not disaggregate expenditure by level of education. Some expenditure, of course were clearly attributed to a given level of education. Vocational education (as a category of expenditure) was clearly given as vocational secondary, and there are other type of expenditure could only occur for some level of education, such as general education and community colleges. But there are other types of expenditure on administration, text books, general exams, social activities and others which were not attributed to a given level of education. This expenditure is distributed over the various levels of education in proportion to the weight of total expenditure that at each level presents.
3. Other ministries and departments of the government spend on educational institutions such as Ministry of Defence, Ministry of Public Health, Ministry of Social Development, Ministry of Planning, Ministry of Awqaf and Islamic Affairs, Central Bank of Jordan and others. But the problem here is that many of these authorities do not keep separate accounts and records for their educational expenditure. Since their expenditure cannot be ignored, we shall make use of the estimated expenditure of these institutions available in the publications of the National Center for Educational Research and Development (NCERD), and the Ministry of Education (MoE) of Jordan.

4. The United Nations Relief and Working Agency (UNRWA) expenditure does not include administration cost at the international headquarters which would include 3-5 percent of the UNRWA expenditure.
5. The private schools expenditure poses a particular problem for our study. Since private schools do not report their expenditure and are unwilling to do so, to have a complete picture of the total educational expenditure is not possible. Hence, some other assumptions will have to be made.

We thought of using the general economic assumption that expenditure is roughly equivalent to income and fees to be calculated as a proxy for expenditure. This would be true in a competitive and mature industry, but it is not true for private schools of Jordan. Some of these private schools make high profit margins while some religious private schools receive donations from individuals privately. Here we are going to depend completely on the surveys conducted by the NCERD and MoE related to private schools expenditure in Jordan.

Before taking up the discussion on educational expenditure, we will clarify what exactly we mean by education. Education may be said to cover not only the instruction and training in schools and colleges, but also on the job training in the armed force and even education at home or church.

Such a broad definition is found to be valid, but it is not of much use to us. In our research work we will adopt a rather narrow meaning of education. Therefore, we confine our study to what is commonly known as formal education, i.e. dissemination's of knowledge by way of instruction in educational institutions, both general and professional. This covers institutions providing primary, preparatory secondary and higher (Community Colleges and Universities) education.

The formal education system of Jordan consists of three levels of education including primary and preparatory for 9 years of compulsory education. Then, in 1989 it was expanded to include 10 years of compulsory education and came to be known as Basic Education. The second level of education covers the Secondary Education which contains two streams : i) The General Secondary (Academic) and ii) Vocational Secondary . The third level of education includes institutions of higher learning such as Universities , Community Colleges and Other Institutions which provide post secondary education.

As we have mentioned before, due to the limitations of data related to the educational expenditure incurred in the Basic level and the Secondary education will be examined together as school education expenditure.

Thus, in our study expenditure on education will be included if it is carried out by any institution formally organised to provide education to the people of Jordan. Training will be included if it serves a relevant school-aged population in formal course-work or when other students are engaged in study, generally accepted as comparable to a given level of education.

3.2 Trends In The Total Recorded Expenditure On Education

In this chapter, we study the growth of total recorded educational expenditure incurred on all levels of education during the period 1971 to 1992.

We attempt to answer the following questions :

How much has been spent on education at current prices and in real terms?

What proportion of national income is devoted to education ? What is the proportion of public, private and UNRWA expenditure to the total recorded educational expenditure? Has the per pupil expenditure increased or decreased over the period of our study?

In Table No3.1 we give the total recorded educational expenditure and its percentage to Gross National Product (GNP) . These figures show that the total recorded educational expenditure (i.e. public, private and UNRWA) was JDs 11.222 million in 1971 and rose to JDs 91.392 million in 1980, indicating a growth of 7.14 times (or 714.4 percent) over 1971 figures. Again in 1982 it has increased to JDs 119.747 million and JDs 231.078 million in 1988, while in 1992 it has reached to JDs 367.001 million showing a growth of 206.48 percent above 1982 figures.

It is clear that the total recorded educational expenditure has increased at a faster rate over the period 1971-82 than the period 1982-92 in terms of current prices i.e. the educational expenditure has increased by 9.67 times (or 967 percent). During the period 1971-82 while the increases in the total educational expenditure over the period 1982-92 was little more than two times (or 206.5 percent) only.

Over the whole period from 1971 to 1992 the total recorded educational expenditure increased by 31.7 times (or 3170.37 percent) in terms of current prices.

The figures of Gross National Product (GNP) at market price show an increase of 14.72 times (or 1472 percent) during the period under review, as it rose from JDs 199.4 million in 1971 to JDs 1190.1 million and JDs 3135.8 million in 1980 and 1992 respectively. It is clear that the increase of total recorded expenditure on education was higher than the increase of GNP by 17 times (or 1700 percent) which means that the total educational expenditure as a proportion of the GNP has increased over the period of our study.

TABLE No. 3. 1

**Total Recorded Educational Expenditure and its percentage to GNP
(in million JDs at current prices)**

Year	Educational Expenditure	GNP (at market price)	Ed. Expenditure as % of GNP
1971	11.222	199.400	5.63
1975	31.915*	376.000	8.49
1980	91.392*	1190.100	7.68
1982	119.747	1673.400	7.16
1986	187.499*	2097.300	8.94
1988	231.078	2129.900	10.85
1989	278.711	2206.400	12.63
1990	282 398	2375.900	11.89
1991	330 962	2559.100	12.93
1992	367.001	3135.800	11.70
The Overall Growth rate			
1971-92	3170.37%	1472.62%	6.07 %

* Estimated expenditure on the basis of the information provided by MoE.

Sources :

1. Najati Albokhari, Education in Jordan , Ministry of Information, Jordan , 1973.
2. NCERD, Education and Training in Jordan- A Descriptive and Financial Survey, Publication Series No. 30, NCERD, Jordan December , 1993.
3. Central Bank of Jordan (CBJ) Annual Reports - 1975.
4. Central Bank of Jordan (CBJ) Monthly Bulletin Vol.30 No.2, Feb, 1994.
5. Central Bank of Jordan (CBJ) Quarterly Statistical Series , 1964-89, Oct, 1989.

As it is shown in Table No.3.1 the total recorded educational expenditure as proportion of the GNP has moved from 5.63 percent in 1971 to 7.68 percent in 1980 and 8.94 percent in 1986. Again , it rose to 10.85 percent and 12.93 percent in 1988 and 1991 respectively, while in 1992 it slightly declined to 11.7 percent. However, this proportion devoted to education in Jordan compare favourably with the similar proportions devoted to education for the UK in 1985 which was estimated to be 5.3 percent and 6.7 percent in 1983 for the USA.

In this sense, the educational expenditures as a proportion of the national income in Jordan was much higher than the similar proportions devoted to education in the United States of America and United Kingdom at a far more advanced stage of economic development

If we treat the expenditure on education as investment it means this type of investment as a proportion of the GNP has increased from 5.63 percent in 1971 to 11.70 percent in 1992. Thus the proportion of GNP devoted to investment in education to create human capital was double during the period 1971 to 1992.

In Table No 3.2 we give information with regard to the growth of total recorded educational expenditure in terms of current prices by source of finance (i.e. Public, Private and UNRWA) and the proportion of each source to the total recorded expenditure in education over the period of our study.

We have seen in Table No 3.1 that the total recorded educational expenditure has increased by 31.7 times (or 3170 percent) at current prices from 1971 to 1992, Table No 3.2 shows that the public expenditure on education of JDs 8.598 million in 1971 rose to JDs 21.775 in 1975 and JDs 62.450 million in 1980, indicating an increase of 6.26 times (or by 626.23 percent). Again it went upto JDs 90.161 million in 1982, to JDs 168.640 million in 1988 and JDs 259.606 million in 1992 showing an increase of 3.15 times (or 315.7 percent) over 1980 figures.

TABLE No. 3.2**Total Recorded Educational Expenditure by Source of Finance
(At Current Prices)****(in million JDs)**

Year	Total	Public	Private	Others**
1971	11.222 (100)	8 598 (76.61)	0.649* (5.78)	1.975 (17.61)
1975	31.918 (100)	21.778 (68.22)	5.611 (17.58)	4.529 (14.20)
1980	91.392 (100)	62.450 (68.33)	17.442 (19.08)	11.500 (12.59)
1982	119.747 (100)	90.161 (75.29)	18.127 (15.13)	11.459 (9.58)
1986	187 499 (100)	137.387 (73.27)	36.005 (19.20)	14.107 (7.53)
1988	231.078 (100)	168.640 (72.98)	47.620 (20.60)	14.818 (6.42)
1989	278.711 (100)	198 414 (71.19)	60.455 (21.69)	19.842 (7.12)
1990	282.398 (100)	201.618 (71.19)	58.162 (20.60)	22.618 (8.01)
1991	330.962 (100)	234.517 (70.86)	70 800 (21.39)	25.645 (7.75)
1992	367.001 (100)	259 606 (70.74)	81 732 (22.27)	25.663 (6.97)
The Overall Growth rate				
1971-1992	3170.37 %	2919.38 %	12493.53%	1199.39%

Figure in parentheses are the percentage

* This comprises private contribution to public schools only.

**Others includes UNRWA, Foundations and Charity expenditure.

Sources :

1. Table No.3.1.
2. Najati Albokhari, Education in Jordan , Ministry of Information, Jordan , 1973.
3. Majed Bader & Others ,(MoE) Financing Pre-Higher Education in Jordan , Problems & Suggested Solutions 1970-1989, MoE (Govt, of Jordan) 1990.(Arabic).
4. NCERD. Education and Training in Jordan , A Descriptive and Financial Survey Publications Series No. 30, Dec, 1993, Jordan

The overall trend shows that the public educational expenditure at current prices has increased by 29.19 times (or 2919 percent) from 1971 to 1992. The figures given in Table No.3.2 show that in 1971 the public expenditure accounted for 76.61 percent of the total recorded expenditure in education. Then it went on declining to 75.29 percent in 1982, 71.39 percent in 1990 and 70.74 percent in 1992.

The private recorded expenditure which comprises the private institutions expenditure and private contribution to public schools has increased in absolute terms as well as proportional terms over the period. In absolute terms it has increased by 124.94 times (or 12494 percent) i.e. it has increased from JDs 0.648 million in 1971 to JDs 17.442 million in 1980, and rose to JDs 18.127 million, JDs 58.162 million and JDs 81.732 million in 1982, 1990 and 1992 respectively. While its share of the total went up from 5.78 percent in 1971 to 19.08 percent in 1980 to 20.60 percent in 1990 and 22.27 percent in 1992.

The educational expenditure carried out by the United Nations Relief and Working Agency (UNRWA) has increased from JDs 1.975 million in 1971 to JDs 11.500 million in 1980 and JDs 14.818 million in 1988, and lastly in 1992 it has reached to JDs 25.663 million, indicating an increase of 12 times (or by 1199.39 percent) during the period from 1971 to 1992 which is lower than the growth of total recorded educational expenditure by 19.71 times (or 1971 percent). This means that the UNRWA educational expenditure as a proportion of the total educational expenditure has declined over the period. The figures in Table No.3.2 show that the percentage of UNRWA expenditure has declined from 17.61 percent in 1971 to 12.509 percent in 1980 and 6.99 percent in 1992. The overall decline in its percentage is found to be around 10.62 percentage points.

The above observation shows that the development of education in Jordan remains the responsibility of the public sector, though its expenditure as a proportion of the total has declined over the period. It indicates also an increase in the role of private sector in development of education in Jordan, when its proportion has gone up from 5.71 percent in 1971 to 22.27 percent in 1992.

3.3 Educational Expenditure at Constant Prices

The increases in expenditure referred to earlier were in terms of current prices and therefore, a part of the increase can be said to be fictitious or unreal in the sense that a part of this increase is attributed to the price rise. In order to be able to give some dependable comparative picture, it is necessary to give this information in real terms.

In Table No.3.3 we gave the total expenditure of education expressed in terms of educational consumer price index (CPI) taking 1986 as the base year. These figures show the total recorded educational expenditure was JDs 60.660 million in 1971 and it increased to JDs 157.030 million in 1980 indicating a growth rate of 158.9 percent. Again it went upto JDs 169.854 million in 1982, to JDs 212.583 million in 1988 and JDs 265.942 million in 1992 giving a growth rate of 69.4 percent over 1980 figures. Thus the total educational expenditure at constant prices kept on increasing at a simple annual rate of 15.70 percent during 1970-1980 and 5.33 percent over the total period 1980-1992, except the year of 1990 which has experienced a decrease in the total educational expenditure in terms of constant prices when it fell from JDs 233.036 million in 1989 to JDs 228.108 million in 1990 (or a decline of 2.11 percent). Overall the total recorded educational expenditure increased by 3.38 times (or 338 percent) in real terms over the period between 1971 and 1992.

TABLE No. 3.3**Total Recorded Educational Expenditure at Constant Prices****(in million JDs)**

Year	Total	Public	Private	UNRWA
1971	60.660	46.476	3.508	10.676
1975	113.982	77.768	20.039	16.175
1980	157.030	107.302	29.969	19.759
1982	169.854	127.888	25.712	16.254
1986	187.499	137.387	36.005	14.107
1988	212.583	155.142	43.809	13.632
1989	233.036	165.898	50.548	16.590
1990	228.108	162.858	46.980	18.270
1991	252.257	178.748	53.963	19.546
1992	265.942	188.120	59.226	18.596
The Overall Growth rate				
1971-1992	338.41 %	304.77%	1588.31%	74.2%

*Expenditure here expressed in terms of Educational Consumer Price Index

where 1986 = 100.

The public expenditure on education at constant prices was JDs 46.476 million in 1971 increased to JDs 77.768 million in 1975 and JDs 107.302 million in 1980 giving a growth rate of 130.9 percent above 1971 figures. Then it went upto JDs 155.412 million in 1988 and lastly reached to JDs 188.120 million in 1992 showing a growth rate of 75.32 percent over 1980 expenditure. Thus, the public expenditure on education at constant prices has increased by 3.04 times (or 304 percent) from 1971 to 1992. The private expenditure on education at constant prices has increased from JDs 3.508 million in 1971 to JDs 29.969 million 1980 and continued increasing upto 1989 when it has reached to JDs 50.548 million. Then in 1990 it fell to JDs 46.980 million showing a decline of 7.06 percent over 1989 figures. Again it went upto JDs 53.963 million in 1991 and JDs 59.226 million in 1992 showing an increase of 15.88 times (or 1588 percent) at constant prices over 1971 figures.

The UNRWA expenditure in terms of constant JDs has grown by 74.18 percent from 1971 to 1992 , i.e. in 1971 it was JDs 10.676 million and went upto JDs 19.759 million, JDs 18.270 million and JDs 18.596 million in 1980, 1990 and 1992 respectively.

The growth rate of the total recorded expenditure in terms of constant prices of 338 percent was higher than the growth rate of the total population in Jordan of 166 percent during the same period of 1970-92 which shows that the increase in the expenditure in education was not only to meet the increasing demand for education but,also a proportion of this expenditure was devoted to the improvement in the quality of education.

3.4 Trends of Enrolment

From Table No.3.4 it can be observed that the gross enrolment ratio in the basic level of education (gross enrolment ratio is defined as the ratio of the students enrolled in the basic education to the population of the age group 6-15 years) which is

TABLE No. 3.4

**Gross Enrolment Ratio by Level of Education, Gender, and Age Group
in Jordan**

(in percentage)

Level of Education Age group	Basic Education			Secondary Education			Higher Education		
	Age 6-14 years			Age 15-17 years			Age 18-23 years		
Gender	Total	Male	Female	Total	Male	Female	Total	Male	Female
1970	74.97	80.39	68.70	27.54	37.77	16.56	2.6	3.91	1.45
1971	84.79	89.9	79.08	32.4	41.6	21.9	4.31	5.67	2.85
1974	91.8	97.1	86.0	45.9	53.8	37.8	6.5	7.0	5.9
1976	85.3	89.0	81.3	53.2	61.5	44.6	12.9	16.9	9.1
1977	84.1	87.3	80.7	52.2	62.5	42.3	16.1	20.1	12.2
1978	88.2	90.5	85.7	57.9	64.7	51.0	14.0	17.2	10.8
1979	89.0	92.7	85.2	68.7	76.1	61.0	18.1	20.4	15.6
1980	91.9	93.4	89.8	67.3	67.1	67.5	21.0	23.8	18.2
1981	91.0	93.0	89.0	68.3	68.2	68.4	21.6	21.7	18.4
1982	90.2	91.8	88.4	67.9	65.5	70.8	21.1	24.5	17.7
1983	89.9	90.1	89.6	68.2	67.9	68.6	22.08	23.4	20.7
1984	88.6	88.8	89.2	69.1	68.6	69.7	21.54	22.06	21.00
1986	93.1	92.52	93.8	58.63	56.67	60.96	NA	NA	NA
1987	93.3	92.4	94.4	64.97	62.88	67.32	-	-	-
1988	93.4	92.1	94.6	660.3	64.59	67.52	-	-	-
1989	91.4	90.4	92.5	61.15	58.6	63.9	-	-	-
1990	94.2	92.6	95.9	65.8	65.6	66.0	26.6*	28.9*	24.2*
The Overall Changes									
1970-90	19.23%	12.21%	27.2%	38.26%	27.83%	49.44%	24.0%	24.99%	22.45%

* This figures were taken from source No.2.

Sources

1. MoE, The Educational Statistics Yearbook, MoE, Govt. of Jordan , 1970/71 -1992/93.
2. World Report on Education 1993 , UNESCO (Arabic)

corresponding with the age group (6-15) years in 1970 was 74.97 percent and rose to 91.9 percent in 1980 and 94.2 percent in 1990-91, showing an increase of 19.23 percent over 1970 figures. The enrolment ratio for the male population of this age group has moved from 80.39 percent in 1970 to 90.5 percent in 1978 and 92.6 percent in 1990-91, while that of female population has gone upto 95.9 percent in 1990-91 from 68.7 percent of 1970 showing an increase of 27.2 percent over the period of 1970-90 compared to 12.21 percent an increase in male enrolment over the same period.

The secondary education is the second stage of the educational system in Jordan, corresponding to the age group 16 and 17 years, the enrolment ratio for the population aged 16 and 17 years was 27.54 percent in 1970 and went upto 57.9 percent and 65.8 percent in 1978 and 1990 respectively. This gives an increase of 38.26 percent in 1990 over 1970 figures. The male and female students enrolled at the secondary education accounted for 37.77 percent and 16.56 percent of the total male and female population in 1970 respectively. However, these figures in 1990 have gone upto 65.6 percent and 66.0 percent respectively. It is clear that the female enrolment ratio at the secondary education has improved much faster than that of the male of the same age group i.e. the female enrolment ratio increased by 49.44 percent, while the males enrolment ratio has gone up by only 27.83 percent over the same period.

The enrolment ratio for the population of the age groups 18-23 years at the higher education has improved from 2.6 percent in 1970 to 18.1 percent, 21.54 percent and 26.6 percent in 1980, 1984 and 1990 respectively. The enrolment ratio for the males and females have increased by 24.99 percent and 22.75 percent respectively i.e. for the males it was 3.91 percent in 1970 and went up to 22.06 percent in 1984 and 28.9 percent in 1990, while that of the females has risen from 1.45 percent in 1970 to 21.00 percent in 1984 and 24.2 percent in 1990.

From the figures given in the table mentioned above we observe that the educational system has been expanding rapidly and it is clear that the male population has enjoyed a higher enrolment ratio than the female upto 1983 but, since 1984 the females population of different age groups have shown a higher enrolment ratio than that of the male. The increase in the enrolment ratios at different levels of education was mainly due to the parents awareness towards education and implementation of government policy. However, the increase in the enrolment ratios at different level of education show the efficiency of the educational system in Jordan in providing the educational opportunity and in meeting the increased demand for education of the different age groups of the population in Jordan.

Table No.3.5 provides information on the total number of students enrolled at all levels of education in Jordan by gender and their percentage to the total, which shows that in 1970 the total number of students was 379,797 and increased to 755,824 in 1980, 1,103,999 in 1990 and 1,209,763 in 1992 showing a growth rate of 218.5 percent over 1970 figures. The male students were 323,068 in 1970 (or 58.7 of percent of the total) and rose to 404,805 (or 53.06 percent) in 1980 and 614, 136(or 50.76 percent) in 1992 giving a growth rate of 175.3 percent in absolute number while, its proportion of the total students (male and female) has declined by 7.94 percent.

The female students were 156, 729 accounting for 41.3 percent of the total in 1970. Then it went upto 351, 019 (or 46.4 percent of the total) in 1980 and 595,627 (or 49.24 percent) in 1992 showing a growth rate of 280 percent in absolute number and an increase of 7.94 percent points in their share of the total number of students. From the above mentioned table it is clear that female /male ratio is less than one throughout the period under review in Jordan, but it has increased gradually.

TABLE No. 3. 5

Total Number of Students by Gender in Jordan (all levels of Education)

Year	Grand Total	Male		Female		Female/Male Ratio
		Total	%	Total	%	
1970	379,797	223,068	58.7	156,729	41.3	0.70
1971	407,941	236,122	57.9	171,819	42.1	0.72
1972	445,298	253,956	57.0	191,342	43.0	0.75
1973	485,860	274,135	56.4	211,725	43.6	0.77
1974	523,076	290,165	55.5	232,911	44.5	0.80
1975	560,609	312,489	55.7	248,120	44.3	0.79
1976*	595,107	327,476	55.0	267,631	45.0	0.81
1977*	618,557	339,425	54.9	279,132	45.1	0.82
1978*	652,273	354,448	54.3	297,825	45.7	0.84
1979*	688,188	386,492	56.2	301,696	43.8	0.78
1980	755,824	404,805	53.6	351,019	46.4	0.86
1981	779,293	416,114	53.4	363,179	46.6	0.87
1982	819,209	435,730	53.2	383,419	46.8	0.88
1983	854,934	452,671	52.9	402,263	47.1	0.89
1984	876,823	463,895	52.9	412,928	47.1	0.89
1985	918,601	475,492	51.8	443,109	48.2	0.93
1986	933,862	479,568	51.3	454,294	48.5	0.95
1987	964,651	499,610	51.8	465,041	48.2	0.93
1988	1,003,365	516,988	51.5	486,377	48.5	0.94
1989	1,041,729	538,299	51.7	503,430	48.3	0.93.5
1990	1,103,999	570,712	51.7	533,287	48.3	0.93
1991	1,174,190	604,708	51.5	569,482	48.5	0.94
1992	1,209,763	614,136	50.76	595,627	49.24	0.97
The Overall Growth Rate						
1970-92	218.5%	175.3%	-	280.0%	-	-

* This does not include students enrolled in Universities of Jordan .

Sources

1. MoE, The Educational Statistics Yearbook, 1970/71 -1992/93.
2. Ministry of Higher Education, Annual Report on Higher Education Statistics in Jordan, 1992/93

However, the ratio of the female students to the male students was on an average of 0.75 (i.e. against 100 male students there was increased to 0.84 and 0.94 during the periods 1975-74 and 1986-1992 respectively.

It should be mentioned that the ratio of the male population to the female population (of all age groups or the total population) has been little more than one throughout in Jordan. However, the male population was 52.23 percent for the year 1980-90, while the female proportion accounted for 47.77 percent in the same period.

It is clear that there has been a discrimination or inequality in providing the enrolment opportunity for the male and the female population, but the improvement in the female/male ratio can be explained from the fact that Jordan has already succeeded in extending education to almost the entire range of the school age going population equally to male/female population. Table No.3.6 shows the distribution of students over the different levels, of education in Jordan. The figures given in this table show that the total number of students of the basic education was 344,326 in 1970 and increased to 319,085 in 1980, 926,445 in 1990 and 1,014,895 in 1992 indicating a growth of 194.7 percent, while its percentage to the total was 90.66 percent in 1970 and declined to 81.91 percent in 1980 and 79.36 percent in 1988. Then it rose to 84.37 percent in 1989, while in 1992 it has reached to 83.9 percent. The secondary education students have showed a higher growth than that of the basic education as it has increased from 30905 in 1970 to 114,117 in 1992 (or by 269.5 percent) though it has declined in 1989 to 95649 from 145,970 in 1988. This declined has taken place due to the expansion of the basic education to include one more year from the secondary cycle. Similarly in percentage, the secondary education students to the total was 8.14 percent in 1970 and went up to 13.38 percent in 1980 and 14.55 percent in 1988 then it had fallen to 9.18 percent and 9.44 percent in 1989 and 1992 respectively.

TABLE No. 3.6

Total Number of Students by Level of Education in Jordan - 1970-1992

Year	Grand Total	Basic		Secondary		Higher Education	
		Total	%	Total	%	Total	%
1970	379,797	344,326	90.66	30905	8.14	4566	1.2
1971	407,941	369,175	90.5	31991	7.84	6775	1.66
1972	445,298	404,154	90.76	34540	7.76	6604	1.48
1973	485,860	440,937	90.75	37687	7.75	7236	1.5
1974	523,076	472,309	90.3	42648	8.15	8119	1.55
1975	560,609	501,620	89.88	48578	8.66	10411	1.86
1976	595,107	527,383	88.62	60718	10.20	7006*	1.18
1977	618,557	541,202	87.49	70812	11.45	6543*	1.06
1978	652,273	562819	86.28	82638	12.67	6816*	1.05
1979	688,188	589,697	85.69	89870	13.06	8621*	1.25
1980	755,824	619,085	81.91	101,138	13.38	35601	4.71
1981	779,293	627,758	80.55	106,960	13.73	44575	5.72
1982	819,209	654,459	79.9	114,557	13.98	50193	6.12
1983	854,934	678,442	79.36	120,850	14.13	55642	6.51
1984	876,823	699,699	79.80	125,357	14.30	51767	5.9
1985	918,601	739,552	80.51	126,999	13.83	52050	5.66
1986	933,862	746,285	79.91	127,961	13.7	59616	6.39
1987	964,651	770,771	79.91	134,688	13.96	59192	6.13
1988	1,003,365	796,282	79.36	145,970	14.55	61113	6.09
1989	1,041,729	878,905	84.37	95649	9.18	67175	6.45
1990	1,103,999	926,445	83.92	100,953	9.14	76601	6.94
1991	1,174,190	982,690	83.69	112,542	9.58	78958	6.73
1992	1,209,763	1,014,895	83.9	114,177	9.44	80691	6.66
The Overall Growth Rate							
1970-92	218.5%	194.7%	-	269.5%	-	1667.2%	-

This does not include students, enrolled in Universities of Jordan .

Sources :

- 1 MoE, The Educational Statistics Yearbook, 1970/71 -1992/93.
2. Ministry of Higher Education, Annual Report on Higher Education Statistics in Jordan,1992/93

TABLE No. 3.7**Number of Students by Controlling Authority in Jordan**

Year	Grand Total	Public Schools		UNRWA		Private	
		Total	%	Total	%	Total	%
1970	378,604	265,984	70.25	83377	22.03	29243	7.72
1972	443,043	372,029	70.65	968820	21.85	33194	7.50
1974	519,763	372,967	71.76	107,773	20.73	39022	7.51
1976	588,101	424,300	72.75	119,212	20.27	44589	7.58
1980	736,378	563,986	76.59	130,923	17.78	41469	5.63
1982	819,209	624,329	76.21	134,207	16.38	60673	7.41
1983	854,934	654,564	76.56	135,033	15.79	65337	7.65
1984	879,823	678,869	77.08	136,017	15.51	64937	7.41
1986	902,868	709,518	78.58	137,045	15.18	56305	6.24
1987	836,553	740,485	79.06	134,953	14.41	61115	6.53
1988	1,003,366	784,301	78.17	134,552	13.41	84512	8.42
1989	1,041,728	811,267	77.88	133,956	12.86	96505	9.26
1990	1,103,999	859,245	77.06	136,183	12.34	108571	9.83
1991	1,174,190	917,720	78.06	141,010	12.00	115460	9.94
1992	1,209,763	935,241	77.31	152,610	12.61	121,912	10.08
The Overall Growth Rate							
1970-92	219.5%	251.6%	-	83.0%	-	316.9%	-

* Figures for the year 1970-1980, 1986 and 1987 does not include community colleges enrolments.

Sources :

1. MoE, The Educational Statistics Yearbooks, MoE, 1970-71 to 1992-93.
2. MoE, Annual Report on Higher Education , Govt. of Jordan , 1992-93.

Students at the higher education in 1970 were 4566 accounting for 1.2 percent of the total number of students in that year. Then it went up to 35601 (or 4.71 percent) in 1980 and 80691 (or 6.66 percent) in 1992 showing an increase of 16.67 times (or 1667 percent) while the percentage has gone up to by 5.46 percent.

It is clear that as we move up from one level to another the growth rate of enrolment increases which indicates the improvement in the transition rates from one level of education which has been expanding faster than the lower levels.

The proportion of students enrolled in public schools in 1970 was 70.25 percent of the total students. This population had gone up to 76.59 percent and 77.3 percent in 1980 and 1992 respectively. Similarly the private schools enrolment as proportion of the total increased from 7.72 percent in 1970 to 10.08 percent in 1992. While, the percentage of students served by UNRWA schools had declined from 22.03 percent in 1970 to 17.78 percent in 1980 and 12.61 percent in 1992. This further confirms our earlier observation with regards to the increasing role of private sector in providing education in Jordan and it is clear that the UNRWA schools are losing the grounds as provider of education in Jordan (see Table No.3.7).

3.5 Per Pupil Expenditure

The progress in education can be assessed through the changes in per pupil expenditure. As it is shown in Table No.3.8 the average expenditure per pupil in 1971 was of the order of JDs 29.64 and rose to JDs 124.11 in 1980, JDs 146.17 in 1982, JDs 255.8 in 1990 and JDs 303.37 in 1992 giving a growth of little more than 9 times (or 923.5 percent) in terms of current prices over the whole period.

The expenditure by public institutions per student has improved from JDs 32.32 in 1971 to JDs 144.41, JDs 277.58 in 1982, 1990 and 1992 respectively. This shows an increase of 7.5 times (or 758 .85 percent) at current prices.

TABLE No. 3. 8**Per Pupil Expenditure at Current Prices****(in JDs)**

Year	Total	Public	Private	UNRWA
1971	29.64	32.32	22.19	23.69
1975	61.41	58.39	143.79	42.02
1980	124.11	110.73	420.60	87.84
1982	146.17	144.41	298.77	85.38
1986	207.67	193.63	639.46	102.94
1988	230.30	215.02	563.47	110.13
1989	267.55	244.57	626.44	148.12
1990	255.8	234.65	535.70	166.05
1991	281.53	255.54	605.87	181.87
1992	303.37	277.58	640.42	168.16
The Overall Growth Rate				
1971-92	923.51%	758.85%	2786.07%	609.83%

Expenditure per pupil in private schools was the highest as it was JDs 22.19 in 1971 which increased dramatically to JDs 420.6 in 1980, JDs 535.7 in 1990 and JDs 640.42 in 1992, as it can clearly be seen that it has increased at current prices by 27.8 times (or 2786 percent), which is much higher than that of public expenditure over the same period. While UNRWA expenditure per student at current prices has increased by 6 times (or 609.83 percent) as it has risen from JDs 23.69 in 1971 to JDs 87.84, JDs 166.08 and JDs 168.16 in 1980, 1990 and 1992 respectively.

Table No.3.9 provides the information of per pupil expenditure in terms of constant prices (CPL 1986.100). This table indicates that the average expenditure per pupil in real terms has grown by 37.2 percent i.e. it has gone up from JDs 160.22 in 1971 to JDs 213.25 in 1980 and JDs 219.83 in 1992. Similarly public and private expenditure per pupil in real term rose by 15.12 percent and 304.97 percent respectively. While, UNRWA expenditure per pupil has declined by 4.87 percent i.e. public expenditure per pupil increased from JDs 174.73 in 1971 to JDs 201.15 in 1992. Private expenditure per pupil in 1971 was JDs 119.96 and rose to JDs 485.81 in 1992 and that of UNRWA has fallen to JDs 121.8 in 1992 from JDs 128.04 in 1971.

From the above observations, it is clear that the private institutions expenditure per pupil was almost double of that in public institutions in Jordan. The marked enrolment increase in the private schools indicate a growing demand and willingness to pay for what is largely perceived as high quality of education.

During the period from 1971 to 1992 the per capita income increased by 5.33 times in terms of current prices while, per pupil expenditure at current prices increased 9.88 times, which is higher than the increase in per capita income by 4.55 times. This might be taken to show that the quality of education in Jordan has improved with the improvement in the general economic standards of the nation.

TABLE No. 3.9

Per Pupil Expenditure in Terms of Constant Prices

(in JDs)

Year	Total	Public	Private	UNRWA
1971	160.22	174.73	119.96	128.04
1975	219.30	208.51	513.45	150.08
1980	213.25	190.25	722.68	150.92
1982	207.34	264.84	423.78	121.11
1986	207.67	193.63	639.46	102.94
1988	211.87	197.81	518.38	101.31
1989	223.70	204.49	523.79	123.85
1990	206.62	189.54	432.71	134.16
1991	214.58	194.77	461.79	138.61
1992	219.83	201.15	485.81	121.8
The Overall Growth Rate				
1971-92	37.2%	15.12%	304.97%	-4.87%

3.6 Conclusions

- 1) The proportion of the Gross National Product (GNP) devoted to education has gone up to 11.7 percent by 1992 from 5.63 percent in 1971 which is higher than that of other middle income countries and above the average of Arab -countries (8.5 percent in 1990).
- 2) The total recorded educational expenditure has risen by 31.7 times at current prices over the years 1971-92 and by 3.38 times in real terms. However , the major causes for this dramatic increase in the educational expenditure are outlined as below :
 - a) The increase in the enrolment in general and the enrolment at the higher level of education in particular.
 - b) The changes in the price level and
 - c)The spread of education over much wider fields and its spread into more expensive branches.
- 3) The trend in expenditure by source of finance reveals that the share of public expenditure has fallen to 70.74 percent in 1992 from 76.6 percent in 1971 and that of UNRWA has decreased from 17.61 percent in 1971 to 6.97 percent in 1992. While, the share of private sector has gone up to 22.27 percent in 1992 from 5.78 percent in 1971. This shows that the role of private sector in developing education in Jordan has been increasing over the period under review. The largest share of expenditure is however provided by the government.
- 4) The enrolment ratio for the population of the age group 6-14 years corresponding to the basic cycle in 1970 was 74.97 percent which went up to 91.9 percent in 1980 and 94.2 percent in 1990. The enrolment ratio for the age group 15-17 years at the secondary cycle increased from 27.54 percent in 1970 to 65.8 percent in 1990, while the enrolment ratio at the higher level of education for the age group 18-23 years was 2.6 percent in 1970 and rose to 26.6 percent in 1990.

- 5) The number of students at all levels of education in Jordan i.e. Basic, Secondary and Higher level of education, was 379,797 in 1970 and went upto 755,824 in 1980 and 1,209,763 in 1992 showing an increase of 218.5 percent which as exceeded the growth rate of the population of 166.01 percent, which means that the proportion of population going to schools has gone up over the period 1970-90.
- 6) The female students ratio to the male students has improved from 0.70 in 1970 to 0.86 in 1980 and 0.97 percent in 1992. This shows an improvement in the enrolment ratio of the female population.
- 7) The proportion of students enrolled in public schools has increased from 70.25 percent in 1970 to 76.59 percent in 1980 and 77.31 percent in 1992. In private schools the enrolment has gone upto 10.08 percent in 1992 from 7.72 percent in 1970, while the number of students enrolled in UNRWA schools in proportion to the total has declined from 22.03 percent in 1970 to 12.61 percent in 1992. This further confirms our earlier observation with regards to the increasing demand for education at private schools and the decline in the role of UNRWA schools.
- 8) Over the period between 1971 and 1992 per pupil expenditure has increased by 9.23 times (or 923 percent) in terms current prices and by 37.2 percent in real terms which can be taken to show the improvement in the quality of education in Jordan.

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