

CHAPTER FOUR

EXPENDITURE OF SCHOOL LEVEL OF EDUCATION

4.1 Introduction

School level of education comprising the basic and secondary cycles constitutes the very base of the whole system of education . The super structure of an educational system can be firmly created only if we pay due attention to the building up and the expansion of the basis, as the development of the higher level of education will be affected sooner or later by the expansion and development of the base ¹ .

In Jordan the base it self has become much wider than that of other developing countries. In 1989 the basic education was expanded from nine years of compulsory education to ten years. The enrolment ratio in this stage which is corresponding with the age group of 6-15 years has reached to 94.2 percent as it is one of the highest in middle income countries.

The secondary level of education is the second stage of the educational system in Jordan. Corresponding with the age group of 16-17 years, in 1972 , the enrolment ratio of this age group was 32.4 percent went up to 66.0 percent in 1990-91.

The Government (Public) schools accommodate 75 percent of the basic education students and 95 percent of secondary students (both Academic and vocational) while United Nations Relief and Working Agency (UNRWA) serves 15 percent of the total basic students. the private sector provides education to 10 percent of the basic students and 5 percent at the secondary level.

1. Prof K R. Shah, Outlay on Education and its Financing in India - 1950/51 to 1960/61. Unpublished Ph.D thesis, Dept of Economics , Faculty of Arts, M.S.U. of Baroda , July 1968, PP.56

In this chapter, we are going to examine the expenditures incurred in the Basic and Secondary schools, together as expenditures on school level of education due to the limitations of the available data. While enrolment and teacher pupil ratio will be taken separately, at each level of basic and secondary schools.

4.2 Trends on the Educational Expenditures at School Level of Education

Table No.4.1 shows the total recorded educational expenditure incurred in the school level of education by source of finance in term of current prices during the period 1971-1992.

The total recorded expenditures incurred on school level of education (Basic + Secondary) of JDs 8.370 million in 1971, went upto JDs 61.233 million in 1980, indicating a growth rate of 6.31 times (or 631.6 percent) again it increased to JDs 184.722 million in 1990 and lastly reached to JDs 228.800 million in 1992, giving a growth rate of 273.65 percent above 1980 figures. Thus overall the educational expenditures on school level of education has increased by 26.33 times (or 2633.6 percent) from 1971 to 1992. During the same period, the total recorded educational expenditures (of all levels of education) has increased by 31.7 times (or 3170.4 percent) which is higher than the increase of school education expenditure by 5.37 times which means that the expenditure on school level of education as a proportion of the total recorded educational expenditure has declined over the period under review, as it was 75 percent in 1971 and declined to 62.20 percent in 1992.

Public expenditure on this level of education has increased from JDs 5.863 million in 1971 to JDs 40.042 million in 1980, showing an increase of 5.83 times (or 583 percent) during the 10 years period (i.e. 1971 to 1980) . Again it rose to JDs 86.906 million in 1986 and continued to increase. In 1992 it has reached to JDs 154.612 million giving a growth rate of 286.12 percent over 1980 figures.

TABLE No .4.1

Expenditure on School Level of Education at Current Prices and its Percentage to the Total Educational Expenditure

(in million JDs)

Year	Total	Public	Private	UNRWA	Total Recorded (Exp. All Levels)
1971	8.370 (100)	5.863 (71.05)	0.532 (6.35)	1.975 (23.60)	11.222 (74.58)
1975	23.156 (100)	14.699 (63.48)	3.928 (16.96)	4.529 (19.56)	31.915 (72.56)
1980	61.233 (100)	40.042 (65.4)	11.028 (18.0)	10.163 (16.6)	91.392 (67.00)
1982	80.722 (100)	58.509 (72.48)	11.040 (13.68)	11.713 (13.84)	119.747 (67.41)
1986	121.584 (100)	86.906 (71.5)	20.618 (16.9)	14.060 (11.6)	187.499 (64.85)
1988	134.500 (100)	93.764 (69.7)	26.270 (19.5)	14.466 (10.8)	231.078
1989	158.159 (100)	110.646 (70.00)	29.711 (18.8)	17.802 (11.2)	278.711
1990	184.722 (100)	127.214 (68.90)	35.572 (19.20)	21.936 (11.9)	282.398
1991	203.942 (100)	136.644 (67.0)	42.850 (21.6)	24.669 (10.8)	330.962 (62.62)
1992	228.800 (100)	154.612 (67.6)	49.521 (21.6)	24.669 (10.8)	367.001 (62.34)
The Growth Rate over the Period :					
1971-80	631.6%	582.96%	1972.93%	414.58%	714.4%
1980-92	273.65%	286.12%	349.05%	142.73%	301.56%
1971-92	2633.57%	2537.08%	9208.06%	1149.06%	3170.37%

* The figures in parentheses are the percentage

Sources :

1. Majed Bader ,(MoE) Financing Pre-higher Education in Jordan - Problems and Suggested Solutions , 1970 -89 (Arabic) 1990.
2. NCERD, Education and Training in Jordan , A Descriptive and Financial Survey Jordan , Publications Series No. 30, Dec, 1993.
3. Table No. 3.1.

In proportional terms the public expenditure accounted for 70.05 percent of the total school expenditure in 1971, then it declined to 67.6 percent in 1992. The public expenditures increased by 25.37 times (or 2537 percent) during 1971 to 1992 in absolute term, while in proportional terms it has declined by 2.45 percentage points (i.e. from 70.05 percent in 1971 to 67.6 percent in 1992).

The private recorded expenditures² on school level of education was JDs 0.532 million in 1971, accounting for 6.35 percent of the total expenditures in this level of education, increased to JDs 11.040 million in 1982 presenting 13.68 percent of the total, and lastly in 1992 it reached to JDs 49.521 million, while its proportion of the total expenditure incurred in school education rose to 21.6 percent, this gives an increase equal to 92.08 times and an increase of 15.25 percentage points in its proportion to the total.

The United Nations Relief and Working Agency (UNRWA) expenditure have grown by 11.5 times at current prices, as its has increased from JDs 1.975 million in 1971 to JDs 24.667 million in 1992. This increase was in absolute figures, while in proportional terms it fell to 10.8 percent in 1992 from 23.6 percent in 1971.

As we have mentioned earlier that the increase in expenditure in terms of current prices are unreal or it might take place to offset the increase in costs of goods and education services, to have real picture of the state of expenditure on this level of education, we are going to examine the school level expenditure at constant prices following the procedure adopted in the previous chapter.

2. Private Recorded Educational Expenditures comprises expenditures of Private educational institutional and private contribution (Fees, Exams, Hostel etc) to Public institutions.

In Table No.4.2 we have given the school expenditure in terms of constant prices (1586= 100) which shows that in 1971 the total expenditure incurred in school education was JDs 45.243 million and rose to JDs 105.211 million in 1980, then it further increased to JDs 149.210 million in 1990 and in 1992 it rose to JDs 165.797 million giving a growth rate of 266.46 percent over 1971 figures.

The public expenditure at constant prices which was JDs 31.692 million in 1971 and JDs 68.801 million in 1980 has declined marginally to JDs 86.259 million in 1988 from JDs 86.906 million in 1986 (decline of 0.74 percent). Then it has gone upto JDs 102.758 million in 1990 and JDs 112.038 million in 1992 giving a growth rate of 253.52 percent above 1971 figures.

The private expenditure of JDs 2.875 million in 1971 moved up to JDs 18.948 million in 1980 , then it has declined to JDs 15.660 million in 1982, again it has gone up to JDs 20.618 million, to JDs 28.733 million and JDs 35.885 million in 1986, 1990 and 1992 respectively, which shows that over the whole period it has increased by 11.5 times (or by 1148.17 percent) at constant prices.

The United Nations Relief and Working Agency (UNRWA) expenditure at constant prices has shown a growth rate of 67.42 percent as it was JDs 10.676 million in 1971, increased to JDs 15.848 million in 1982, then it has fallen to JDs 14.060 million in 1986 and in 1988 it further decreased to JDs 13.308 million, while in 1990 and 1992 it rose to JDs 17.719 million and JDs 17.874 million respectively.

However, it is clear that the inflation rates has its impact in the movement of the educational expenditure in terms of constant prices, while the decline in the expenditure in 1988 has taken place due to the devaluation of Jordan Dinars.

TABLE No. 4.2**Expenditure of School Level of Education at Constant Prices
and its Growth Rate***(in million JDs)*

Year	Total	Public	Private	UNRWA
1971	45.243	31.692	2.875	10.676
1975	82.763	52.496	14.092	16.175
1980	105.211	68.801	18.948	17.462
1982	114.499	82.991	15.660	15.848
1986	121.584	86.906	20.618	14.060
1988	123.735	86.259	24.168	13.308
1989	132.240	92.513	24.842	14.885
1990	149.210	102.758	28.733	17.719
1991	155.443	104.149	32.660	18.634
1992	165.797	112.038	35.885	17.874
The Growth Rate for the period				
1971-80	132.85%	117.09%	559.09%	63.56%
1980-90	41.82%	49.36%	51.64%	1.47%
1990-92	11.12%	9.03%	24.89%	0.87%
1971-92	266.46%	253.52%	1148.17%	67.42%

The above expenditures are expressed in terms of Constant Consumer Price Index where 1986= 100

4.3 Trends in Enrolment

In this part we are going to examine the changes in enrolments of Basic ,General Secondary & Vocational Secondary schools in Jordan during the period 1970-1992.

4.3.1 Basic Education

Table No.4.3 gives information regarding the basic education enrolment by gender and area wise in Jordan over the period 1970-92. It will be observed that over the period under review the total number of students enrolled in basic education has increased by almost 2 times (or 194.7 percent). It has increased from 344, 326 in 1970 to 619, 085, 926,445 and 1,014, 895 in 1980,1990 and 1992 respectively.

The male students of the basic education increased from 197, 918 in 1970 to 327,398 in 1980 and 517,199 in 1992 giving an increase of 161.3 percent , while as a proportion of the total in 1970, male students formed 57.5 percent and this has fallen to 52.7 percent and 50..9 percent in 1980 and 1992 respectively. The female students percentage of the total has risen from 42.5 percent in 1970 to 47.3 percent in 1980 and 49.5 percent in 1992. In absolute number , the number of female students of the basic schools in Jordan was 146,408 in 1970 and rose to 291,691 and 497,696 in 1980 and 1992 respectively.

The share of urban and rural schools of the total enrolment at the basic education has remained almost constant as the proportion of urban schools enrolment was 66.78 percent in 1970, declined marginally to 64.21 percent in 1991, while the rural schools enrolment accounted for 33.22 percent in 1970 and has gone upto 35.79 percent in 1991. It should be noted here that distribution of students at basic education in urban and rural areas is similar to the distribution of the total population in urban and rural areas in Jordan .

TABLE No. 4.3

Basic Education Students by Gender and Locations in Jordan

Year	Grand Total	Male		Female		Urban	Rural
		Total	%	Total	%	%	%
1970	334,326	197,918	57.50	146,408	42.5	66.78	33.22
1971	369,175	208,871	56.6	160,304	43.4	64.8	35.2
1972	404,154	225,917	55.9	178,237	44.10	63.3	36.7
1973	440,937	244,372	55.4	196,565	44.6	62.8	37.2
1974	472,309	259,698	55.3	212,611	44.7	62.0	38.0
1975	501,620	274,006	54.6	227,614	45.4	61.6	38.4
1976	527,383	286,303	54.5	241,080	45.5	61.0	39.0
1977	541,202	293,077	54.15	248,125	45.85	59.5	40.5
1978	562,819	302,518	53.7	260,301	46.3	57.8	42.2
1979	589,697	314,243	53.3	275,454	46.7	57.30	42.7
1980	619,085	327,394	52.7	291,691	47.3	56.4	43.6
1981	627,758	331,272	52.8	296,486	47.2	55.6	44.4
1982	654,459	344,145	52.6	310,314	47.4	54.9	45.1
1983	678,442	355,483	52.4	322,959	47.6	55.52	44.48
1984	699,699	367,297	52.5	332,402	47.5	54.17	45.83
1985	739,552	387,312	52.4	352,240	47.6	NA	NA
1986	746,285	389,034	52.1	357,251	47.9	60.20	39.80
1987	770,771	400,635	52.0	370,136	48.0	59.50	40.5
1988	796,282	413,411	51.9	382,871	48.1	59.80	40.2
1989	878,905	455,232	51.8	423,673	48.2	59.04	40.96
1990	926,445	474,347	51.6	448,098	48.4	59.23	40.77
1991	982,690	501,625	51.0	481,065	49.0	64.21	35.79
1992	1,014,895	517,199	50.5	497,696	49.5	-	-
The Overall Growth Rate							
1970-92	194.7%	161.3%	-	239.9%	-	-	-

* The distribution of students over Urban and Rural Schools for the years 1973-81 was estimated on the basis of the changes in their distribution over the period 1972-1982.

Sources .

1. MoE, The Educational Statistics Yearbook , 1970/71 - 1992/93.

The distribution of basic education over different educational authorities is given in Table No.4.4 , which shows that in 1970 public schools enrolment accounted for 69.03 percent and went upto 74.3 percent in 1980 and 75.46 percent in 1992 and that of the private schools was 7.00 percent in 1970 and rose to 8.3 percent and 9.63 percent in 1980 and 1992 respectively, while the proportion of student enrolled at UNRWA basic education schools was 23.97 percent in 1970 and declined to 21.1 percent , 18.13 percent and 14.91 percent in 1980, 1986 and 1992 respectively.

From the above observation it is clear that the basic education has been expanding very fast as the enrolment ratio for the age group 6-15 years, corresponding to this level of education has reached to 94.2 percent of the total population which is the highest among Arab countries. It is clear that the ratio of females to males at the basic education has risen to 0.96 in 1992 from 0.74 in 1970, which can be taken to show the improvement in the enrolment opportunity of female population of this age group in Jordan .

The above observation also shows that there has been a shift in the enrolment from the UNRWA schools to private and public schools which might have occurred because Palestinians living in refugee camps are slowly moving away from these camps into areas served by government schools or might wealthy parents send their children to private schools.

4.3.2 General Secondary Education (Academic)

The total number of students of the general secondary schools in 1970 was 27952 and rose to 87673 in 1980 and 116,735 in 1988 giving a growth rate of 317.6 percent , while in 1989 it has fallen to 69124 (or by 47.78 percent) and in 1992 it has reached to 86613. The decline in secondary education students in 1989 has taken place

TABLE No. 4.4

Basic Education Students By Controlling Authority in Jordan

Year	Grand Total	Public		UNRWA		Private	
		Total	%	Total	%	Total	%
1970	344,326	237,689	69.03	82557	23.97	24080	7.0
1971	369,175	256,207	69.4	86387	23.4	26581	7.2
1972	404,154	280832	69.5	95502	23.6	27820	6.9
1973	440,937	308656	70.0	101,856	23.1	30425	6.9
1974	472,309	331,220	70.13	107,140	22.68	33949	7.19
1975	501,620	351,886	70.15	113,216	22.57	36518	7.28
1976	527,383	340,471	70.2	118,580	22.5	38332	7.3
1977	553,291	390,685	70.61	123,135	22.25	39471	7.14
1978	579,436	413,921	71.43	127,044	21.92	38471	6.65
1979	607,001	440,887	72.64	129,651	21.36	36463	6.0
1980	619,085	454,409	74.3	130,300	21.1	31376	5.6
1981	641,063	485,705	73.73	133,572	20.83	35359	5.44
1982	654,459	485,705	74.21	132,572	20.25	36182	5.54
1983	678,442	506,384	74.64	133,373	19.66	38685	5.7
1984	699,699	522,931	74.73	134,473	19.2	42295	6.06
1985	739,552	555,034	75.05	137,926	18.65	46592	6.30
1986	746,285	560,920	75.16	135,531	18.13	50044	6.71
1987	770,771	582,818	75.62	133,442	17.31	54511	7.07
1988	796,282	603,910	75.84	133,029	16.71	59343	7.45
1989	878,905	679,170	77.27	132,565	15.08	67170	7.65
1990	926,445	714,741	77.15	134,802	14.55	76902	8.30
1991	982,690	754,436	76.77	139,527	14.20	88727	9.03
1992	1,014,895	765,888	75.46	151,271	14.91	97736	9.63
The Overall Growth Rate							
1970-92	194.7%	222.22%	-	83.23%	-	305.88%	-

Sources.

1. MoE, The Educational Statistics Yearbook , 1970/71 - 1992/93.

due to the reduction of secondary education from three to two schooling years in 1989. However, overall secondary schools students increased by 209.86 percent over the whole period 1970-92 (see Table No.4.5).

The number of male and female students at this level has increased by 103.02 percent and 463.68 percent respectively. From this growth rates, it is clear that the percentage of male students to the total has declined and has caused an increase in the percentage of female students to the total secondary education i.e. the male students formed 70.4 percent in 1970 declined to 54.7 percent and 46.1 percent in 1980 and 1992 respectively. While the proportion of female students increased from 29.6 percent in 1970, to 39.7 percent in 1975, 45.3 percent in 1980, 51.2 percent in 1990 and 53.9 percent in 1992. It is clear that upto 1984 the ratio of female students to male students was less than that of the period 1985-92 where the ratio has crossed one.

The proportion of students served by secondary schools in the urban areas was as high as 91.8 percent in 1970 which has declined to 69.64 percent in 1980 and 68.4 percent in 1990. While the rural schools enrolment was 8.2 percent of the total secondary students in 1970 and increased to 31.6 percent in 1990 (see Table No.4.6).

Of the total secondary students (Academic only) those enrolled in public schools were 81.7 percent in 1970 and 92.7 percent in 1992, while private schools enrolment accounted for 18.3 percent of the total students in 1970 and this proportion decreased to 7.3 percent in 1992.

From the above observation it is clear that unlike the basic education , at this level the percentage of females was higher than that of males. The decline in the proportion of students enrolled in urban areas or the increase in the proportion of students enrolled in rural areas has taken place due to the government policy of establishing new schools in rural areas during the period under review.

TABLE No. 4.5

**Secondary Education Students by Gender and Location
(Urban & Rural) Academic Only**

Year	Grand Total	Male		Female		Urban	Rural
		Total	%	Total	%	%	%
1970	27952	19672	70.4	8280	29.6	91.8	8.2
1971	29071	19962	68.7	9109	31.3	88.0	12.0
1972	30985	20971	67.7	10014	32.3	86.1	13.91
1973	33338	21691	65.06	11647	34.94	83.1	16.9
1974	37154	23138	62.28	14016	37.72	80.27	19.73
1975	42137	25394	60.3	16743	39.7	77.07	22.93
1976	53171	31460	59.2	21711	40.8	75.6	24.4
1977	62115	36930	59.4	25185	40.6	74.32	25.68
1978	73493	42887	58.4	30606	41.6	73.81	29.19
1979	80173	45291	56.5	34882	43.5	71.5	28.5
1980	87673	47953	54.7	39720	45.3	69.61	30.36
1981	90583	47110	52.0	43473	48.0	69.5	30.5
1982	94008	48015	51.0	45993	49.0	69.36	30.64
1983	95540	48841	51.1	46699	48.9	67.43	32.57
1984	96770	49195	50.8	47575	49.2	62.08	37.92
1985	96400	47394	49.2	49006	50.8	-	-
1986	96468	46167	47.9	50301	52.1	71.7	28.3
1987	100,570	47776	47.5	52794	52.5	69.95	30.05
1988	116,735	56434	48.4	60301	51.6	69.58	30.42
1989	69124	33397	48.3	35727	51.7	69.82	30.18
1990	75915	37070	48.8	38845	51.2	68.40	31.6
1991	83255	39546	47.5	43709	52.5	-	-
1992	86613	39940	46.1	46673	53.9	-	-
The Overall Growth Rate							
1970-92	209.86%	103%	-	463.68%	-	-	-

Sources :

- I. MoE, The Educational Statistics Yearbook , 1970/71 - 1992/93.

TABLE No. 4. 6

**Distribution of Academic Secondary Students over
Public and Private Schools**

Year	Grand Total		Public Schools		Private Schools	
	Students	%	Students	%	Students	%
1970	27952	100	22835	81.7	5117	18.3
1972	30985	100	25622	82.7	5356	17.3
1976	53171	100	46976	88.3	6195	11.7
1980	87673	100	80764	92.1	6909	7.9
1982	94008	100	87718	93.3	6290	6.7
1983	95540	100	89513	93.7	6027	6.3
1984	96770	100	90025	93.0	6745	7.0
1986	96468	100	90542	93.8	5926	6.2
1987	100,570	100	94247	93.7	6323	6.3
1988	116,735	100	110,085	94.3	6650	5.7
1989	69124	100	64077	92.7	5046	7.3
1990	75915	100	70501	92.9	5414	7.1
1991	83255	100	77261	92.8	5994	7.2
1992	86613	100	80293	92.7	6320	7.3
The Overall Growth Rate						
1970-92	209.86%	-	251.62%	-	23.51%	

Source :

1. MoE, The Educational Statistics Yearbook , 1970/71 - 1992/93.

4.3.3 Vocational Education

From Table No.4.7 it will be observed that the vocational secondary students increased at a faster rate than the academic secondary students i.e. the number of vocational students increased from 2953 in 1970 to 14415 in 1980 and 27594 in 1992 giving an increase of 8.33 times (or 833 percent) while the academic secondary students increased by little more than 2 times (or 209.86 percent). The male students of the vocational education accounted for 77.6 percent in 1970 and 64.0 percent of the total in 1992. While females students formed 23.0 percent of the total in 1970 and 36.0 percent in 1992.

Public schools accommodated 85.7 percent of the total vocational education students in 1970, 94 percent in 1980 and 97.22 percent in 1992. The remaining 14.3 percent in 1970 and 2.78 percent in 1992 were enrolled in private and UNRWA vocational schools (see Table No.4.8).

It is clear that the vocational education enrolment has increased at a faster rate than the general secondary enrolment to meet the growing demand for skilled labour force and due to the government earlier policy of promoting vocational schools enrolment. It is also, clear that the proportion of females students is relatively small in this level of education , which has been caused by social factors, as females desire to join academic streams rather than vocational education.

From the above observation in the trends in enrolment, we come to a conclusion that school education has reached to the different segments of the population in Jordan . It also shows that how the government succeeded in implementing the policy of opening more schools in rural areas, wherever ten students or more were found. It is clear that the enrolment opportunity has improved in favour of females population.

TABLE No. 4.7

**Students of Vocational Secondary Education
By Gender in Jordan**

Year	Grand Total	Male		Female	
		Total	%	Total	%
1970	2953	2274	77.6	679	23.0
1971	2920	2142	73.4	778	26.6
1972	35	2570	72.1	985	27.9
1973	4349	3109	71.5	1240	28.5
1974	5494	3874	70.5	1620	29.5
1975	6441	4548	70.6	1893	29.4
1976	7547	5430	71.9	2117	28.1
1977	8697	5895	67.8	2802	32.2
1978	9145	6134	67.0	3011	32.5
1979	9697	6548	67.5	3149	32.5
1980	14415	10610	75.0	3805	25.0
1981	16651	11553	69.4	5098	30.6
1982	20549	14094	68.6	6455	31.4
1983	25310	16546	65.4	8764	34.6
1984	28587	18400	64.4	10187	35.6
1985	30599	18596	60.8	12003	39.2
1986	31493	19347	61.4	12146	38.60
1987	34118	20744	60.8	13374	39.2
1988	29235	18605	63.6	10630	36.4
1989	26525	17248	65.0	9277	35.0
1990	25038	16385	65.4	8653	34.6
1991	26174	16604	63.4	9570	36.6
1992	27564	17649	64.0	9915	36.0
The Overall Growth Rate					
1970-92	833.1%	676.12%	-	1360.23%	-

Sources :

1. MoE, The Educational Statistics Yearbook , 1970/71 - 1992/93.

TABLE No. 4.8

Vocational Secondary Students By Controlling Authority

Year	Grand Total	Public		Private		UNRWA	
		Total	%	Total	%	Total	%
1970	2953	2531	85.71	46	1.56	376	12.73
1971	2920	2482	84.0	35	1.2	403	13.8
1972	3555	2986	84.0	18	0.5	551	15.5
1973	4349	3722	85.59	8	0.18	619	14.23
1974	5494	4848	88.25	13	0.23	633	11.52
1975	6441	5773	89.63	56	0.87	612	9.50
1976	7547	6853	90.8	62	0.83	632	8.37
1977	8697	7955	91.47	96	1.1	646	7.43
1978	9145	8310	90.87	192	2.1	643	7.03
1979	9697	8934	92.13	133	1.37	630	6.5
1980	14415	12658	94.0	184	1.37	623	4.63
1981	16651	-	-	-	-	-	-
1982	20549	19846	96.58	148	0.72	555	2.7
1983	25310	24548	96.99	189	0.75	573	2.26
1984	28587	27725	96.98	297	1.04	565	1.98
1985	30599	-	-	-	-	-	-
1986	31493	30554	97.02	335	1.06	604	1.92
1987	34118	33226	97.39	281	0.82	611	1.79
1988	29235	28374	97.06	246	0.84	915	2.10
1989	26525	2577	97.18	223	0.84	525	1.98
1990	25038	24268	96.92	270	1.07	500	2.00
1991	26174	-	-	-	-	-	-
1992	27564	26794	97.22	199	0.71	571	2.07
The Overall Growth Rate							
1970-92	833.42%	958.63%	-	332.6%	-	51.86%	

Sources :

1. MoE, The Educational Statistics Yearbook , 1970/71 - 1992/93.

4.4 Teachers Pupil Ratio

Table No. 4.9 gives information relating to changes in teacher pupil ratio in the basic schools in Jordan over the period 1970-92.

The total number of basic education students increased by 194.7 percent whereas the total number of teachers increased by 362.9 percent over the period 1970-92. This gives less students per teacher in 1992 than in 1970. Teacher -pupil ratio was 1:34.5 in 1970 whereas, in 1980 and 1992, it was 1:27.9 and 1:22.1 respectively. This means that the number of students served by one teacher has decreased by 35.94 percent.

Teacher -pupil ratio at the urban schools was 1:36.9 in 1972 and declined to 1:30.2 in 1982 and 1:25.0 in 1992 giving a decline of 32.25 percent and that of rural basic schools has fallen by 33.33 percent i.e. from 1:28.5 in 1972 to 1:19.00 in 1992. In government basic education schools teacher pupil ratio was 1:34.3, declined to 1:21.0 in 1992 (or by 38.77 percent). Similarly in private basic schools the ratio of students to teachers was much lower than that of public or UNRWA schools as it was 1:25.6 in 1970 decreased to 1:19.1 in 1992 (or by 51.77 percent), while in UNRWA schools teacher-pupil ratio was 1:39.3 in 1970 declined to 1:36.8 in 1992 (or by 6.48 percent).

The information with regards to changes in teacher-pupil ratio at the general secondary schools is given in Table No.4.10. The teacher-pupil ratio at the academic secondary schools was 1:21.9 in 1970 decreased to 1:18.8 in 1984 and 1:17.0 in 1992. This shows that the teacher pupil ratio at the general secondary schools has fallen by 22.37 percent over the whole period. In urban schools the number of students taught by one teacher has reduced by 34.15 percent and that in rural areas has fallen by 1.73 percent .

TABLE No.4.9

Teacher Pupil Ratio in Urban and Rural Basic Schools and by Controlling Authority in Jordan

Year	Grand Total			Urban			Rural			Administrative Authority		
	Students	Teachers	Ratio	Students	Teachers	Ratio	Students	Teachers	Ratio	Public	Private	UNRWA
1970	344326	9968	34.5	-	-	-	-	-	-	34.3	25.6	39.35
1972	404154	12127	33.3	255779	5197	36.9	148375	5197	28.5	32.6	26.0	39.0
1976	527383	17668	29.8	-	-	-	-	-	-	28.1	27.7	38.0
1980	619085	22158	27.9	-	-	-	-	-	-	26.4	23.8	36.7
1982	654459	23393	28.0	359286	11879	30.2	295173	11514	25.6	27.7	22.5	37.6
1983	678442	23596	28.7	376685	12214	30.8	301757	11382	25.5	27.2	21.7	37.6
1984	699699	25074	27.9	379034	12349	30.7	320665	12725	25.2	27.5	22.0	39.1
1986	746285	28797	25.9	449290	16146	27.8	296995	12651	23.4	24.6	20.2	38.0
1987	770771	29839	25.8	458574	16525	27.8	312197	13314	23.4	26.4	20.2	38.0
1988	796282	32031	24.8	476160	17807	26.7	320122	14224	22.5	23.5	19.9	38.5
1989	877562	36529	24.0	518946	19935	26.0	359909	16594	22.0	22.9	19.6	37.4
1990	926445	36930	25.0	548704	20323	27.0	377741	16607	27.7	24.2	19.2	38.0
1991	988606	40728	24.0	631023	23188	27.2	351667	17536	20.0	-	-	-
1992	1022707	46078	22.1	616600	24664	25.0	406109	21414	19.0	21.0	19.10	36.08
The overall Growth Rate												
1970-92	134.7%	2626.2%	-5.94%	141.06%	255.9%	-32.25%	173.7%	312.04%	-33.33%	-38.77%	-51.8%	-6.48%

Sources :

1 MoE, Educational Statistics Yearbook, 1970/71 - 1992/93.

In public secondary schools (Academic) teacher -pupil ratio was 1:22 in 1970 decreased to 1:17 in 1992 (or by 22.72 percent) and in private secondary schools teacher pupil ratio has declined by 40.1 percent over the whole period.

Teacher -pupil ratio of the vocational secondary schools has improved at a faster rate than that of the academic schools as it was 1:18.59 in 1970 and fell to 1:12.13 in 1990 showing a decline of 34.7 percent (see Table No. 4.11).

It is observed that at both the basic and secondary schools the teacher pupil ratio in 1992 has fallen by almost one third from 1970 figures and it is clear that the teacher-pupil ratio in rural schools was much lower than that of urban schools, except for the year 1992, when the teacher pupil ratio in rural basic schools was higher than that of urban schools (i.e. at rural basic schools the ratio was 1:17, while at the urban schools it is 1:16).

The teacher-pupil ratio at private basic and secondary schools is much lower than that of public basic and secondary schools and it has improved at a faster rate than that of public schools, while the ratio was found to be the highest at UNRWA basic schools where it has marginally declined by 6.48 percent over the whole period. However, the decline in the teacher pupil ratio indicates the improvements in the quality of education equally in urban and rural schools.

4.5 Per Pupil Expenditure

Another way of assessing the progress, or the absence of it in the quality of school education is to observe changes in per pupil expenditure over the period under review.

TABLE No.4.10

Teacher Pupil Ratio in Academic Secondary Schools in Urban , Rural Areas and Controlling Authority in Jordan

Year	Grand Total			Urban			Rural			Administrative Authority	
	Students	Teachers	Ratio	Students	Teachers	Ratio	Students	Teachers	Ratio	Public	Private
1970	27952	1275	21.9	-	-	-	-	-	-	22.0	21.7
1972	30985	1345	23.0	26681	1097	24.3	4304	248	17.0	23.6	20.7
1976	53171	2097	25.3	-	-	-	-	-	-	24.9	29.0
1980	87673	4144	21.1	-	-	-	-	-	-	21.5	17.7
1982	94008	4598	20.4	65208	2950	22.1	28800	1648	17.4	20.9	15.7
1983	95543	4736	20.1	64424	2955	21.8	31116	1784	17.4	20.5	15.7
1984	96770	5150	18.8	60076	3139	19.3	36694	2011	18.2	19.2	14.8
1986	96468	5457	17.7	69166	3566	19.4	27302	1891	14.4	18.0	13.0
1987	100570	5934	17.0	70351	3873	18.1	30219	2061	14.6	17.5	11.6
1988	111675	7015	17.0	81221	4554	17.8	35514	2461	14.4	17.0	12.0
1989	69124	4872	14.8	48265	3122	15.4	20859	1750	12.0	14.5	10.8
1990	75915	4876	16.15	51928	3001	17.3	23980	1875	13.0	16.0	11.0
1991	83255	5203	16.0	-	-	-	-	-	-	-	-
1992	86613	5094	17.0	-	-	16.0	-	-	17.0	17.0	13
The overall Growth Rate											
1970-92	209.86%	299.5%	-22.4%	-	-	-34.2%	-	-	-1.73%	-22.7%	-40.1%

Sources :

1. MoE, Educational Statistics Yearbook, 1970/71 - 1992/93

TABLE No. 4. 11**Teacher Pupil Ratio at the Vocational Secondary**

Year	Student	Teacher	Ratio
1970	2953	159	18.57
1972	3564	237	15.04
1976	7547	455	16.6
1978	9145	579	15.8
1980	14415	791	18.22
1982	20549	1008	20.38
1984	28587	1623	17.61
1986	31493	1990	15.82
1988	29235	2029	14.41
1990	25038	2064	12.13
The Overall Growth Rate			
1970-90	747.88%	1198.11%	-34.7%

Sources :

1. MoE, The Educational Statistics Yearbook , 1970/71 - 1990/91.

From Table No.4.12 it can be seen that in terms of current prices the per pupil expenditure has increased by little more than 8 times (or by 808.17) percent) but, the increase in terms of constant prices worked out to be just 21.8 percent . In public schools, per pupil expenditure at current prices has risen from JDs 22.09 in 1971 to JDs 98.62 in 1982 and JDs 177.11 in 1992, showing an increase of 7 times (or 701.8 percent) at current prices. While in real terms, it has gone up from JDs 120.48 in 1971 to JDs 125.59 and JDs 128.34 in 1980 and 1992 respectively, giving an increase of 6.5 percent in 1992 over 1971 figures.

Similar to what we have observed in the earlier chapter with regards to private expenditure per pupil, at this level of education also private schools expenditure was found to be the highest as it was JDs 18.19 in 1971 and rose to JDs 265.93 in 1980, JDs 430.73 in 1990 and JDs 475.00 in 1992. This gives an increase of more than 25 times (or 2511.3 percent) at current prices. While the increases in this expenditure in real terms was 2.5 times (or 250.1 percent) as it went up from JDs 98.31 in 1971 to JDs 344.2 in 1992.

In UNRWA schools per pupil expenditure increased in terms of current prices by 5.8 times (or by 582.3 percent) but in real terms , it has fallen by 8.56 percent over the period 1971-92 i.e. at current prices it has gone up from JDs 23.81 in 1971 to JDs 77.63 and JDs 162.46 in 1980 and 1992 respectively. In terms of constant JDs it has fallen to JDs 117.71 in 1992 from JDs 128.73 in 1971.

The above observation with respect to the increase in per pupil expenditure at the school level of education confirms our earlier findings with regards to changes in teacher pupil ratio which indicates that the quality of schools education has improved with the improvement of the general standard of the educational system in Jordan .

TABLE No. 4.12

Per Pupil Expenditure at School Level of Education

(In JDs)

Year	Current Prices				Constant Prices			
	Total	Public	Private	UNRWA	Total	Public	Private	UNRWA
1971	22.3	22.09	18.19	23.81	120.57	120.48	98.31	128.73
1975	44.97	39.92	100.66	42.02	160.60	125.59	361.13	150.08
1980	85.02	73.09	265.93	77.63	146.08	125.59	456.92	133.38
1982	104.97	98.62	259.03	83.93	148.89	139.89	367.43	119.04
1986	139.07	127.42	366.18	103.29	139.32	127.42	366.18	103.44
1988	142.74	126.30	396.59	108.24	131.32	116.20	364.86	99.58
1989	162.29	143.88	410.15	133.76	135.69	120.30	342.94	111.84
1990	179.80	157.15	430.73	162.13	145.23	126.94	347.92	130.96
1991	187.92	159.44	451.01	174.51	106.37	121.52	343.76	133.01
1992	202.64	177.11	475.00	162.46	146.84	128.34	344.20	117.71
The Overall Growth Rate								
1971-92	808.7%	701.8%	2511.3%	582.32%	21.08%	6.5%	250.1%	-8.6%

4.6 Efficiency Indicator

4.6.1 Overage Ratio

The overage ratio is defined as the ratio of students whose age is above 6 years in the first grade to the total number of students of the first grade and above 7 years in the 2nd grade and so. The overage ratio has to be examined as it shows the efficiency of the educational system to keep the students of a particular age in the equivalent grade at the particular time though the overage ratio also reflects the repetition ratio.

The overage ratio by grade is given in Table No.4.13 which shows that the overage ratio at the lower grades of the basic cycle was relatively small and it increases from one grade to another upto the 12th grade where it was 44.09 percent in 1982 and 36.15 percent in 1992. At the first and second grade, the overage ratio were 6.04 percent and 9.81 percent in 1992 respectively. While at the 10th grade, the overage ratio in 1982 was 40.15 percent and had fallen to 28.0 percent in 1992.

Looking to the overage ratio at the basic cycle, we find that in 1982, the overage ratio was 24.77 percent and has fallen to 23.8 percent in 1989 and 22.04 percent in 1992. At the secondary cycle, the ratio of the over aged students was as high as 41.0 percent in 1982. It has declined to 34.61 percent in 1992. While the overage ratio by gender shows that the ratio of over aged male students at the basic and secondary cycles was higher than that of females for most of the years i.e. at the basic the overage ratio for male students was 22.50 percent in 1984 and the female students overage ratio was 20.36 p. In 1992, the ratio were 21.84 percent and 21.53 percent for males and females respectively (Table No.4.14).

TABLE No. 4. 13

Overage Rates by Gender and Grade 1982-92 in Jordan

(in percentage)

Grade	Gender	1982	1983	1984	1986	1987	1988	1989	1990	1992
1 st	Total	6.04	4.5	7.23	11.58	12.82	12.38	10.43	10.18	10.00
	Male	5.78	3.76	7.10	11.00	12.28	11.76	10.84	9.86	11.02
	Female	6.33	5.28	7.35	12.18	13.36	12.98	10.00	10.52	10.56
2 nd	Total	9.81	7.81	9.71	8.43	16.86	15.78	13.25	13.40	13.80
	Male	8.85	6.61	9.45	8.35	16.28	16.35	13.23	12.81	14.20
	Female	10.86	9.11	10.00	8.50	15.10	15.18	13.23	14.02	13.48
3 rd	Total	13.65	10.74	15.06	16.75	19.85	18.32	15.41	15.47	15.46
	Male	12.32	9.36	13.45	16.54	19.91	18.58	15.35	15.12	16.00
	Female	15.09	12.11	16.74	16.97	19.78	18.04	15.48	15.48	14.9
4 th	Total	23.57	20.14	20.97	25.60	27.40	23.93	21.53	21.14	21.06
	Male	21.39	18.78	19.39	26.08	27.20	23.92	20.88	21.36	21.68
	Female	26.06	21.60	22.69	20.07	27.06	23.93	22.22	20.91	20.04
5 th	Total	30.86	29.88	29.13	32.24	35.42	29.15	26.09	-	25.25
	Male	29.91	29.83	27.21	33.74	36.64	29.07	26.24	-	26.33
	Female	31.91	29.95	31.24	30.59	27.02	29.22	25.93	-	20.04
6 th	Total	35.16	33.56	32.16	36.09	37.65	31.86	27.73	27.14	27.22
	Male	34.11	33.09	30.95	37.84	39.10	32.30	28.55	28.40	28.55
	Female	36.33	34.09	41.31	34.14	36.02	31.36	28.64	25.80	25.80
7 th	Total	37.18	38.85	35.72	39.62	42.05	36.30	33.09	31.23	28.50
	Male	35.11	37.66	34.56	40.50	43.63	36.91	33.58	31.61	29.20
	Female	39.50	40.18	37.02	38.68	40.30	35.63	32.55	30.82	27.70
8 th	Total	37.53	38.23	36.44	38.49	40.97	35.67	33.22	31.21	28.32
	Male	36.55	36.25	32.83	39.57	41.90	36.08	33.37	31.79	28.77
	Female	38.68	40.57	34.89	37.30	39.98	35.22	33.05	30.57	27.87

contd...

Grade	Gender	1982	1983	1984	1986	1987	1988	1989	1990	1992
9 th	Total	37.09	37.03	33.77	35.61	41.19	36.89	33.94	31.53	27.83
	Male	36.84	34.18	32.83	37.03	42.48	36.08	33.70	32.26	27.99
	Female	37.39	40.46	34.89	34.03	39.76	35.58	34.20	30.74	21.67
10 th	Total	40.15	37.06	31.10	31.09	31.35	32.03	35.89	35.25	28.00
	Male	40.03	34.52	28.85	30.65	29.50	32.77	34.73	35.05	27.11
	Female	40.00	39.72	33.32	31.44	32.90	31.27	37.11	35.45	28.86
11 th	Total	38.90	39.67	34.53	33.00	35.18	33.27	27.27	26.80	31.73
	Male	41.87	38.27	33.85	33.00	36.62	33.66	27.25	26.47	31.45
	Female	35.87	41.06	35.24	33.00	35.16	32.87	27.30	27.08	32.01
12 th	Total	44.09	41.55	40.75	34.54	37.76	43.08	33.13	31.90	36.15
	Male	49.56	43.07	41.93	39.44	40.00	46.79	35.93	36.04	37.95
	Female	37.60	39.89	39.45	36.69	35.67	38.93	30.40	27.62	34.26

Sources :

1. MoE, The Educational Statistics Yearbook , 1982/83 - 1992/93.
2. Victor Belah, T. Anahar and Alkharouf Amel, (NCERD) General Education Indicators in Jordan, 1989-92. NCERD Aug, 1994.

However, the gap between male and female students overage ratio was much higher at the secondary cycle than that of the basic cycle in 1982. The overage ratio for male students was 43.87 percent . It has decreased to 34.61 percent in 1992, while the overage ratio for female students was 38.0 percent and it has fallen to 33.13 percent in 1992.

It is clear that the overage ratio has declined over the period 1982-92 due to the decline in the repetition ratio i.e. a decline in the ratio of the number of students who repeated the same grade more than once as these students create an additional cost for the educational authorities in Jordan . But it is clear from the above observations, that even after 33 years of the educational planning in Jordan , still the population of the age of 6 years join the first grade at later age. While the overage ratio for male students was higher than that of females mainly because of more female students dropout than male students especially at the secondary level .The overall trends can be taken as an indication of improvement in the internal efficiency of the educational system in Jordan .

4.6.2 Promotion Rate

The promotion rate is defined as the ratio of the number of students promoted from one grade to another at the end of the year to the total number of students enrolled at the same grade in the beginning of the year. The promotion rates by grade given in Table No.4.15 show that the promotion rates decline gradually from one grade to another upto the 10th grade. The average promotion rate for students of the first grade was 97.7 percent during the period 1982-92 i.e. out of 100 students enrolled in the first grade, an average of 97 students were promoted to the second grade. This declined to 87.4 percent , 83.64 percent and 83.52 percent at the 5th, 7th and 10th grade respectively. While at the 11th grade the promotion rate was high at 91.4 percent compared to 69.3 percent of the 12th grade students .

TABLE No. 4. 14**Overage Rate by Gender and Cycle of Education****(in percentage)**

Year	Basic Cycle			Secondary Cycle		
	Total	Male	Female	Total	Male	Female
1982	24.77	23.74	25.92	41.0	43.87	38.00
1983	23.62	22.58	24.78	39.3	38.41	40.2
1984	21.50	22.50	20.36	35.15	34.57	35.2
1986	23.56	23.94	23.14	33.8	35.34	32.4
1987	26.42	26.66	26.53	35.9	33.82	34.81
1988	25.72	26.20	25.19	31.42	32.00	30.86
1989	23.8	24.2	23.87	30.32	31.46	28.88
1990	23.32	23.51	23.13	29.32	31.41	27.33
1991	22.03	22.12	21.95	31.77	35.91	27.41
1992	22.04	21.84	21.53	33.85	34.61	33.13

Sources :

1. MoE, The Educational Statistics Yearbook , 1982/83 - 1992/93.
2. Victor Belah, T Anahar and Alkharouf Amel, (NCERD) General Education Indicators in Jordan,1989-92. NCERD Aug, 1994.

TABLE No 4. 15

Promotion Rate by Grade in Jordan

Year	(in percentage)											
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
1982	97.4	98.18	99.61	90.05	86.94	86.91	85.03	86.87	85.17	83.3	93.4	80.7
1983	99.22	100.2	101.28	90.59	88.26	88.29	84.84	86.14	88.01	85.45	95.45	71.04
1984	99.07	100.14	97.94	88.61	85.01	86.92	81.98	82.53	84.71	80.65	88.33	71.38
1986	95.10	92.82	95.95	87.75	84.28	85.15	80.30	81.37	78.78	80.77	83.17	67.5
1987	97.02	97.96	98.44	90.04	85.59	89.0	81.71	84.07	78.86	84.91	86.64	73.03
1988	96.09	97.59	97.99	89.91	86.49	89.71	82.69	86.47	80.84	90.99	91.83	65.73
1989	96.66	97.5	98.7	90.73	87.68	91.07	84.39	87.24	86.24	79.38	97.7	62.01
1990	99.77	101.41	102.7	95.81	90.97	92.67	88.21	90.25	89.41	82.73	94.67	62.01
1992	98.29	98.46	98.29	93.51	91.49	92.38	91.64	92.43	93.3	-	-	-
The Average Promotion rate for 1982-92												
-	97.7	98.25	98.99	90.77	87.4	88.71	83.64	86.31	85.03	83.52	91.04	69.9

Sources :

1. MoE, The Educational Statistics Yearbook 1982-92.
2. Victor Baleh, T. Anahar and Alkharouf, General indicators in Jordan, 1989-92, NCERD, Aug, 1994

It is clear from the figures of the promotion rate that there has been an improvement in the ratio of students promoted from one grade to another, as it has risen over the period 1982-92 except the promotion rates for the 12th grade which has declined from 80.7 percent in 1982 to 62.01 percent in 1990-91. At the first grade it has gone up from 97.4 in 1982 to 99.77 percent and 98.29 percent in 1990 and 1992 respectively. At the 4th and 6th grade the promotion rate increased from 90.05 percent and 86.91 percent in 1982 to 93.51 percent and 92.38 percent in 1992 respectively, while that of the 11th grade students, from 93.4 percent in 1982 it rose to 94.67 percent in 1990. But here we should be aware of such improvement as the promotion rate improves, with the entrance of new students from abroad as it happened in 1990-91 as a result of the Gulf crisis, when thousands of students returned from the Gulf countries. For example, the promotion rates for the 2nd and 3rd grade students in 1990-91 were 101.41 percent and 102.7 percent respectively which means that the number of students promoted at the end of the year were more than the number of students enrolled in the beginning of the year which indicates to an entrance of new students in between.

Looking at the average promotion rate for the students at the basic cycle, we find that it has improved from 91.19 percent in 1982 to 94.35 percent in 1992, while that of the secondary cycle students has fallen from 85.8 percent in 1982 to 79.09 percent in 1990-91.

The female students promotion rate was more than that of male students i.e. at the basic cycle when the promotion rate for female students was 91.48 percent in 1982 and rose to 95.01 percent in 1992, the promotion ratio of male students was 90.93 percent in 1982 and 93.7 percent in 1992. However, the gap between male and female students promotion ratio at the secondary cycle was larger i.e. in 1982 the promotion ratio for male and female students were 85.9 percent and 86.6 percent respectively and in 1990-91 the male students promotion rate was 73.41 percent and that of female student was higher by 11.28 percent at 84.69 percent(see Table No.4.16).

TABLE No .4. 16**Promotion Ratio by Gender and Level of Education**

(in percentage)

Year	Basic Cycle			Secondary Cycle		
	Total	Male	Female	Total	Male	Female
1982	91.19	90.93	91.48	85.8	85.9	86.6
1983	91.18	91.94	92.45	84.02	83.44	84.62
1984	90.02	90.29	89.73	80.32	79.25	81.43
1986	87.84	87.56	88.12	84.59	84.18	85.05
1987	89.9	89.33	90.52	84.0	83.13	84.91
1988	90.48	89.89	91.13	83.79	83.55	84.04
1989	89.96	89.51	90.46	80.34	78.25	82.73
1990	94.14	92.66	95.63	79.09	73.41	84.69
1992	94.35	93.7	95.01	-	-	-

Sources :

1. MoE, The Educational Statistics Yearbook , 1982/83 - 1992/93.
2. Victor Belah, T. Anahar and Alkharouf Amel, (NCERD) General Education Indicators in Jordan, 1989-92 NCERD Aug, 1994.

The overall trend shows an improvement in the promotion rates, while the trend in the promotion rate by gender reveals that the gap between the promotion rates of male and female students widen with an improvement in favour of female students especially at the secondary cycle.

4.6.3 Repetition Rate

The repetition rate as calculated for the years 1982-92 by grade is given in Table No. 4.17, which indicates that the repetition rate is different from one grade to another as it reaches its highest level at the 5th and 7th grade where it was around the average of 10.86 percent at the 5th grade and 10.63 percent at the 7th grade. At the 1st grade it was 1.42 percent, for the 10th grade students it was around 7.02 percent while for the 12th grade it was around the average of 6.89 percent over the period 1982-90/91.

The repetition rate at the basic cycle (The Grade 1 to 9) in 1982 was 5.19 percent and rose to 7.14 percent in 1987, then it had fallen back to the 1982 level when it had declined to 5.9 percent in 1990 and lastly in 1992 it had reached to 4.53 percent. Similarly at the secondary cycle as it does not show any significant difference from what we have observed in the basic cycle, i.e. in 1982 the repetition rate for the secondary education students was 5.7 percent and rose to 7.83 percent in 1984, while in 1990 it had fallen to 5.5 percent.

The figures given in Table No. 4.18 shows that the repetition rate for male students was higher than that of female students, i.e. by 1992. The repetition rate for the male students was 4.84 percent, while that of female students was 4.20 percent at the basic cycle, and at the secondary cycle the male and female students repetition rates in 1990 were 7.79 percent and 3.2 percent respectively. This shows that in 1990 the male students repetition rate was two and half times more than the female students repetition ratio.

TABLE No 4. 17

Repetition Rate by Grade in Jordan

Year	(in percentage)											
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th
1982	0.14	0.14	0.15	7.63	10.63	8.57	9.6	7.28	4.04	6.5	.32	7.4
1983	0.08	0.08	0.14	8.53	10.07	8.96	10.46	8.36	4.04	7.47	3.84	5.11
1984	0.18	0.30	2.91	10.35	12.5	9.79	11.69	9.50	4.56	9.08	6.60	7.65
1986	2.08	2.48	3.32	10.67	12.12	9.06	11.46	9.33	5.87	7.55	5.98	5.87
1987	2.18	2.20	2.76	9.20	11.61	8.48	11.49	9.86	8.51	6.73	4.43	7.07
1988	2.32	2.22	2.74	8.99	11.02	7.90	11.07	8.54	8.76	4.12	2.87	9.05
1989	2.17	2.11	2.17	8.19	9.79	6.98	10.07	7.40	4.67	7.02	2.60	6.65
1990	2.11	1.73	2.01	7.47	9.76	7.92	9.21	6.08	0.05	7.74	4.02	7.06
1992	1.52	1.42	1.55	6.19	7.83	6.5	6.71	5.57	4.37	3.64	2.15	5.65
The Average rate for the Period 1982-92												
-	1.42	1.4	2.02	8.88	10.86	8.45	10.63	8.29	9.91	7.02	4.19	6.98

Sources :

1. MoE, The Educational Statistics Yearbook 1982-92.
2. Victor Baleh, T Anahar and Alkharouf, General Education indicators in Jordan, 1989-92, NCERD, Aug, 1994.

TABLE No. 4.18**Repetition Ratio by Gender and Cycle of Education**

(in percentage)

Year	Basic Cycle			Secondary Cycle		
	Total	Male	Female	Total	Male	Female
1982	5.19	5.11	5.26	5.7	7.2	4.0
1983	5.66	5.83	5.46	5.6	6.60	4.56
1984	6.91	7.11	6.68	7.83	9.59	5.99
1986	7.29	7.56	6.95	6.57	7.15	5.93
1987	7.14	7.55	6.70	6.06	6.08	6.04
1988	6.85	7.31	6.32	5.17	6.31	6.73
1989	6.05	6.43	5.63	4.62	6.78	2.28
1990	5.94	6.16	5.71	5.5	7.79	3.2
1992	4.53	4.84	4.20	-	-	-

Sources

1. MoE, The Educational Statistics Yearbook , 1982/83 - 1992/93.
2. Victor Belah, T. Anahar and Alkharouf Amel, (NCERD) General Education Indicators in Jordan, 1989-92. NCERD Aug, 1994.

The data given in Table No.4.18 shows an improvement in the repetition ratio at both the cycles of education (Basic and Secondary) over the recent years. As it is generally accepted that the high repetition ratio is connected with the low efficiency of the education system , as it indicates the level of educational wastage, but the improvement in the repetition ratio observed over the recent years in Jordan is enough to show the improvement in the efficiency of the educational system in Jordan .

4.6.4 Drop-Out Rate

Table No. 4.19 provides the information on the drop out rates by grade during the period 1982-92. This table indicates that the highest drop out ratio was among the students of the 12th grade with an average of 23.73 percent and lowest was at the 3rd grade at an average of 0.08 percent .

Over the period 1982-90/91 the drop out rate has declined for all the grades except that of the 12th grade students which has gone up from 11.9 percent in 1982 to 30.93 percent in 1990-91. While the drop out rates for the grades 1 to 6 have crossed zero to reach -1.88, -3.14, -4.71, -3.28, -0.73, and -0.59 percent in 1990-91 respectively. Which means that the number of students of the grades (1-6) at the end of the year were more than the number of the students at the beginning of the year, or the promotion ratio plus the repetition ratio for the students at these grades was more than 100 percent .

However , these figures do not reflect the real problems of drop out that exists among the students of schools in Jordan . When these figures were calculated the entrance of new students from the Gulf countries in 1990-91 to schools in Jordan were not taken into account. Even at the 12th grade the drop out rate was as high as 30.93 percent which was calculated as follows :

$$\text{Drop out rate} = (1 - (\text{Promotion Rate} + \text{Repetition Rate})).$$

TABLE No 4.19
Drop out Rate by Grade in Jordan

Year	(in percentage)											
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
1982	2.47	1.67	0.24	2.30	3.00	4.53	5.38	5.86	10.79	10.3	3.3	11.9
1983	0.71	-0.28	-1.42	0.88	1.66	2.75	4.70	5.50	7.95	7.08	0.71	23.86
1984	0.76	0.44	0.85	1.05	2.49	3.29	6.34	7.97	10.74	10.27	5.07	20.97
1986	2.82	1.70	0.37	1.58	3.6	5.74	8.24	9.3	15.35	11.68	10.85	26.63
1987	0.73	0.16	1.2	0.78	2.80	2.52	6.81	6.07	12.63	8.36	8.93	19.9
1988	0.59	-0.19	-0.73	1.10	2.49	2.39	6.24	4.99	10.40	4.89	5.30	25.22
1989	1.17	0.39	-0.87	1.08	2.53	1.95	5.54	5.36	9.09	13.6	-0.30	30.37
1990	-1.88	-3.14	-4.71	-3.28	-0.73	-0.59	2.58	6.67	10.54	9.53	1.29	30.93
1992	0.19	0.12	0.16	0.3	0.68	1.12	1.65	2.00	2.33	2.66	1.77	1.10
The Average Drop out rate over the period 1982-90												
-	0.92	0.75	-0.63	0.68	2.23	2.82	5.73	6.09	10.93	9.46	4.39	23.72

Sources

1. MoE, The Educational Statistics Yearbook 1982-92.
2. Victor Baleh, T. Anahar and Alkharouf, General indicators in Jordan, 1989-92, NCERD, Aug, 1994

TABLE No .4.20**Drop Out Ratio by Gender and Cycle of Education****(in percentage)**

Year	Basic Cycle			Secondary Cycle		
	Total	Male	Female	Total	Male	Female
1982	3.62	3.96	3.26	8.5	6.8	10.3
1983	2.16	2.23	2.09	10.38	9.96	10.38
1984	3.07	2.6	3.59	11.85	11.16	12.57
1986	4.9	4.88	4.93	8.84	8.87	9.02
1987	2.96	3.12	2.78	9.94	10.79	90.5
1988	2.67	2.80	2.55	11.04	9.89	12.23
1989	3.99	4.06	3.89	15.04	14.97	14.99
1990	-0.08	1.18	-1.34	15.41	18.72	12.11
1992	1.12	1.45	0.79	-	-	-

Sources :

1. MoE, The Educational Statistics Yearbook , 1982/83 - 1992/93.
2. Victor Belah, T. Anahar and Alkharouf Amel, (NCERD) General Education Indicators in Jordan,1989-92. NCERD Aug, 1994.

So those students who had completed the 12th grade but had not filled up the forms for the General Secondary Exams were included in the dropouts. This is one of the reasons behind the high drop out rate among the 12th grade students shown in the published data.

The available data shows that at the basic cycle the drop out rate for the total students was 3.62 percent in 1982 which declined to 1.12 percent in 1992. The drop out rates for male students at the basic cycle was 3.96 percent in 1982 which decreased to 1.18 percent in 1992. While that of female students was 3.26 percent and 0.79 percent in 1982 and 1992 respectively.

The drop out rate for students of the secondary cycle was 8.5 percent and 15.41 percent in 1982 and 1990-91 respectively. The male students drop out rate was 6.8 percent in 1982 and went up to 18.72 percent in 1990-91, while that of female students was 10.3 percent and 12.11 percent in 1982 and 1990-91 respectively. The figures of drop out rates by gender shows that the female students drop out rate at the secondary cycle was higher than that of the male students due to social reasons such as marriage (see Table No. 4.20).

4.7 Level of Education in Jordan

The first question that concerns us is : what is the current state of school education in Jordan ? The answer to this question should depend on judgement regarding the level of educational expenditure . In order to answer this question we make an international comparisons on the basis of the indices chosen earlier.

4.7.1 School -Age Population Covered

Table No. 4.21 gives the percentages with respect to 10 countries of the developed and developing nations. These percentages indicate that the proportion of school -age population attending the first and second level of education in 1980 and 1990. These figures show that the proportion of school -age children attending schools in developing countries is much lower than that of advanced countries. The enrolment ratio at the first level of education of the equivalent age group in a developing country like Gambia in 1980 was 80 percent and 77 percent in 1990. Similarly, in Pakistan the ratio was 39 percent and 52 percent in 1980 and 1990 respectively. While in a developed country like Bulgaria the enrolment ratio of school age population at the first level was as high as 98 percent in 1980 and 95 percent in 1990. But the figures related to the enrolment ratio at the first level of education in Jordan show that in 1980 and 1990 the ratios were 104 percent and 97 percent respectively which has exceeded the average of 94.7 percent in developing countries in 1980. It is clear also that it is above the average of the first level attendance in Arab countries of 76.2 percent and 83.4 percent in 1980 and 1990 respectively.

At the second level of education the enrolment ratio in developing countries in 1990 was below 50 percent . Even in countries like Gambia, Pakistan and Bangladesh, the enrolment rate has not crossed 20 percent , while in developed countries it had reached upto 90 percent in 1990. In Jordan the enrolment rates at the second level of education were 76 percent in 1980 and 63 percent in 1990, compared to the average of school attendance at the second level in Arab countries of 35.7 percent in 1980 and 42.3 percent in 1990.

This shows that the expansion of the school education in Jordan has been much faster than that of developing countries. Even the school attendance ratio in Jordan was equal to that of many developed countries.

TABLE No. 4.21**Gross Enrolment Ratio in 1980 and 1990 at the 1st and 2nd Level of Education**

Countries	First Level		Second Level	
	1980 (%)	1990 (%)	1980 (%)	1990 (%)
Gambia	80	77	12	18
Zaire	92	76	24	24
India	83	99	30	44
Pakistan	39	52	14	21
Bangladesh	58	77	15	19
UK	103	105	84	83
Bulgaria	98	95	85	73
Venezuela	94	97	22	34
Jordan	107	97	76	63
Arab Countries	76.2	83.4	38.2	53.1
Developing Countries	94.7	89.4	35.7	42.3
Advanced Countries	100.9	101.9	85.8	90.3

Sources :

1. UNESCO, Report on World's Education, UNESCO, Publications (Arabic) 1993.

As it is stated in the 5th page of the World Bank Report ³ , that Jordan is one of the middle income countries which has one of the highest enrolment ratio by age group and gender at the first and second level of education in 1989-90.

4.7.2 Teacher Pupil Ratio

It can be observed from Table No.4.22 that the teacher pupil ratio in Jordan at the first level of education is much lower than that of developing countries i.e. in 1990 the number of students served by one teacher was 25 in Jordan compared to 23 in the United Kingdom, 47 in India and 32 in Gambia. While at the second level of education the teacher pupil ratio attained in Jordan was much better than that of developing countries and even better than that of many advanced countries i.e. the teacher pupil ratio at the second level of education was 1:15 in Jordan , 1:29 in India 1:17 in United Kingdom and 1:14 in Canada.

Generally the teacher-pupil ratio (the number of students served by one teacher) is used to measure the quality of education . Thus, the above observation proves that the quality of school education (Basic + Secondary) has improved much more than other developing nations or it can also be said that the quality of school education in Jordan is similar to that on many advanced countries.

3. The World Bank Staff Appraisal Report, Human Resources Development, Sector Investment Loan , (Jordan) Report No. 7641, p.5.

TABLE No. 4.22**Teacher - Pupil Ratio in 1990 at the 1st and 2nd Level of Education
in Selected Countries.**

Countries	First Level of Education	Second Level of Education
Canada	1:15	1:14
Bulgaria	1:15	1:14
Norway	1:17	1:13
UK	1:27	1:17
Denmark	1:11	-
Developing Countries		
Algeria	1:28	1:17
Egypt	1:24	1:18
Gambia	1:32	1:16 (1980)
Kenya	1:31	1:17
India	1:47	1:29
Pakistan	1:43	1:19
Bangladesh	1:63	1:27
Jordan	1:25	1:15

Sources :

- 1 UNESCO, Report on World's Education, UNESCO, Publications (Arabic) 1993.

4.8 Conclusion

The proportionate share of the general education schools (Basic and Secondary) in the total educational expenditure decreased from 74.58 percent in 1971 to 67.41 percent in 1982 and 62.34 percent in 1992. As result, the corresponding share of the higher educational institutions (Professional education) has gone up to 37.66 percent in 1992 and 25.42 percent in 1971. The increase in expenditure in general education in real terms of the order of 266.46 percent is lower than that of 338.4 percent for the total recorded educational expenditure incurred at all levels of education over the period under review.

Even the increase of the order of 181.45 percent in the number of students enrolled in general education schools is much lower than that of 218.14 percent of the total number of students in Jordan. In other words the share of general education schools in the total educational expenditure and enrolment has decreased over the period of our study.

In absolute figure the number of students attending schools education (Basic and Secondary)schools in Jordan has increased from 401,166 in 1971 to 1,129,072 in 1992 (or by 181.45 percent) out of this 92.03 percent were students attending basic schools in 1971 and 89.89 percent in 1992 and the remaining 7.97 percent in 1971 and 10.11 percent in 1992 were enrolled in secondary schools both general and vocational secondary. The female/male ratio at the general education schools (i.e. Basic Academic Secondary and Vocational Secondary) has improved from 0.74 in 1971 to 0.96 in 1992.

Generally per pupil expenditure and teacher -pupil ratio are used to assess the quality of education. The expenditure per pupil of the school level of education has gone up by 8 times at current prices and by 21.8 percent in real terms. While the teacher pupil ratio (i.e. the number of students taken care by one teacher) at the basic schools has fallen from 1:34.5 in 1971 to 1:25 in 1992 (or by 35.94 percent) While that of the academic and vocational secondary schools has fallen by 22.37 percent and 34.7 percent respectively. Thus, the increase in per pupil expenditure at current prices and in real terms along with the decline in teacher-pupil ratio in Jordan shows that the quality of education at the general education schools has improved in Jordan.

Furthermore, for the period for (1982-1992) for which the required data could be obtained. We found that there has been improvement in the internal efficiency indicators also i.e. overage ratio, promotion ratio, repetition ratio and drop outs ratio.

In comparison to developed and undeveloped countries, we found the schools attendance for the population of the age groups (6-15) and 16-17 years at the first and second level of education in Jordan is very high and Jordan's enrolment ratio for both the levels is much higher than that of other developing countries even in some cases it is equivent or higher than that of advanced countries. Similarly the teacher pupil ratio at the first and second level of education is much better than that of developing countries and some developed countries also i.e. when the ratio in the U.K. schools were 1:27 at the first level and 1:17 at the second level, the ratio were 1:25 and 1:15 at the first and second level of education in Jordan respectively.

REFERENCES

1. Ahmed A'atel , Development of the Educational System in Jordan , 1921-89 (Arabic) Ministry of Culture, Govt. of Jordan , 1989.
2. Ahmed A'atel, General Education in Jordan A'alalbait Publications Series No. 28 (Arabic).
3. Amin M Salman, Some Problems of the Educational System in Jordan - Ph.D thesis , Institute of education . London University, London, 1986.
4. Dr. Azat Jaradat , Majed Bader and Others (MoE) Financing of Pre-higher Education in Jordan, Problems and Suggested Solutions, MoE , Govt. of Jordan (Arabic) 1991.
5. Dr. Majed Bader and Azat Jaradat, Family (Private) Outlay on Education at the MoE Schools in 1992-93. Research Paper Submitted to the Educational Research Committee of the MoE, Govt. of Jordan (Arabic) 1994.
6. Dr. Victor Bela, T. Annahar and Alkarouf Amel, Indicators of General Education in Jordan . 1989-1992 (NCERD). Publications series No. 28, Aug, 1994.
7. Heyam Ashraidah (MoE) , An Analysis of Annual Cost Per Pupil in the Private Schools of Jordan - Directorate of Planning and Educational Research, MoE (Arabic) Unpublished Study 1982.
8. Lynn Ilon and Hisham Al- Dajah (NCERD) Education and Training in Jordan . A Descriptive and Financial Survey, NCERD, Publications Series No. 30, Dec, 1993.
- 9 MoE, Department of Educational Research , Educational Cost Per Pupil - Unpublished Study - (Arabic) 1985.
10. MoE, Educational Statistics Yearbook 1970/71 - 1992/93.
11. Mohammed M. Majali (MoE) - Report of the growth of the Outlay on Education in Jordan 1965-85, MoE, Dept of Educational Research (Arabic) 1985.
12. Prof. K.R. Shah Outlay on Education and its Financing in India 1950-51 1960-61. Unpublished Ph.D thesis, Dept. of Economics . Arts Faculty of M.S.U. of Baroda, July, 1968.
13. The World Bank, Staff Appraisal Report, Human Resources Development, Sector investment loan (Jordan) report No. 7641.
- 14 UNESCO, Report on Worlds Education, UNESCO's Publications (Arabic) 1993.
15. World Bank, Human Resources Development, Report 1990 ,1991,1992 ,1994 and 1995.