

CHAPTER TWO

The Education System and Educational Attainment in Jordan

2.1 The Country

The Hashmite Kingdom of Jordan came to existence in 1950 which comprises the former Kingdom of Trans- Jordan , and part of Palestine which remained Arab, after the establishment of Israel in 1948.

The State of Trans- Jordan was established in 1921 after the Great Arab Revolt against Turks who ruled the Middle East for more than four centuries.

As a result of Sykespicot agreement between Great Britain and France, Jordan became a part of the British mandate. In 1923 Trans-Jordan was recognised as a constitutional state under the leadership of Amir Abdullah who was proclaimed a King in 1946, when the country became fully independent from the British rule. In the same year the state of Trans-Jordan was renamed as the Hashmite Kingdom of Jordan with the leadership of King Abdullah.

In 1950 the Jordanian and the Palestinian formed a unity on the West and East Banks of Jordan River under the name of Hashmite Kindgom of Jordan .

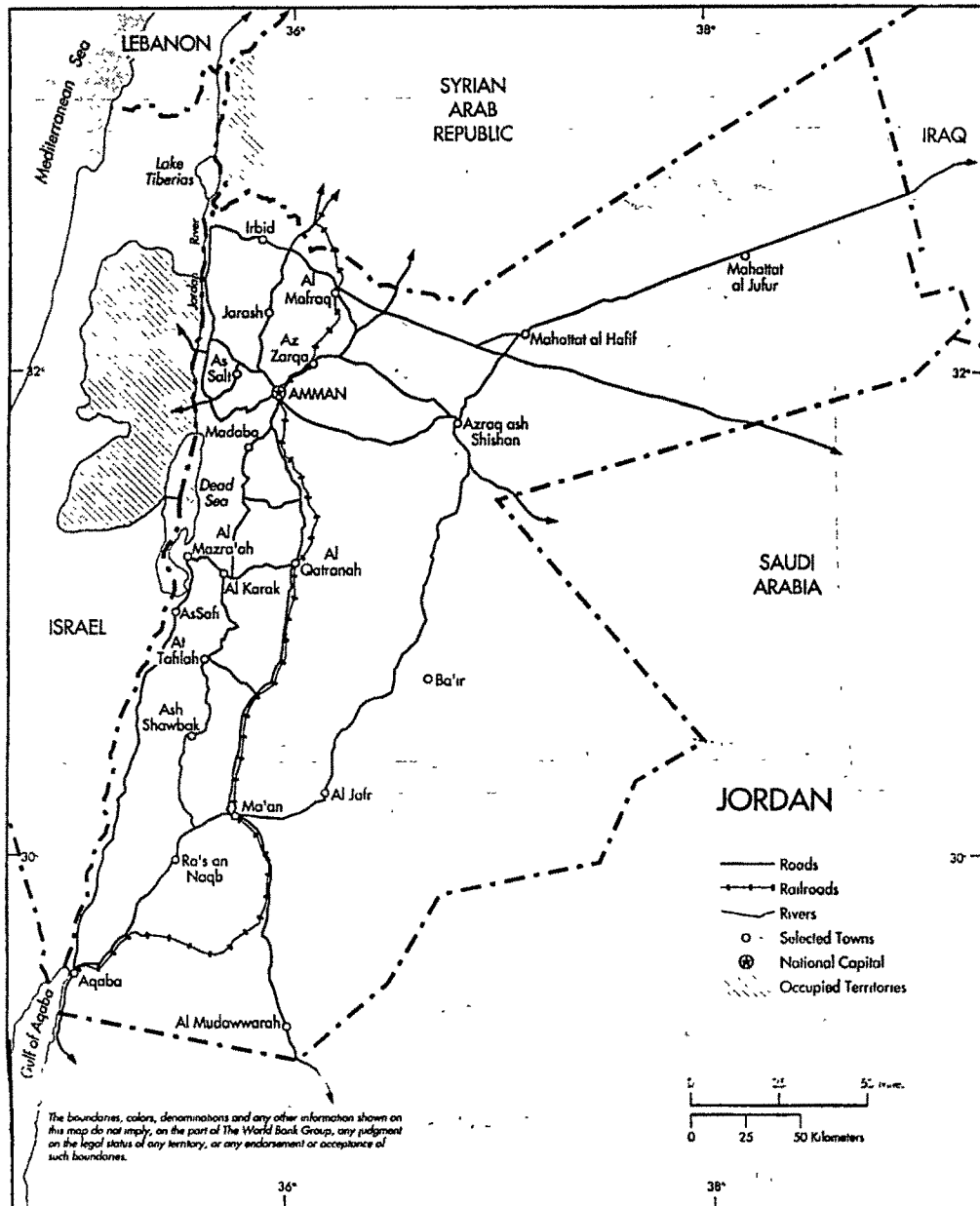
His Majesty King Hussien , the grandson of King Abdullah Ascended the throne in 1953 after the assassination of his grandfather by a Palestinian youth, while offering prayers in Jerusalem.

Jordan is situated in the centre of the Arab World covering an area of 97,000 sq.kms. It is bounded on the north by Syria, on the East by Iraq. On the East and South by Saudi Arabia, and on the West by Israel.

MAP. 1

MAP OF JORDAN

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MAY 1974

2.2 Population

The Jordanian population amounted to 3.1 millions in 1990 with 3.8 percent as growth rate per annum ¹ .

Approximately 45 percent of the population is below 15 years of age, which makes it a young society that possesses a huge human resource potential for the future.

The urban areas accommodate 55 percent, while rural areas accommodate 40 percent and 05 percent are Beduin (unsettled tribes). Over one third of the total population are officially classified as refugees from the West Bank. This proportion of population is located in number of camps.

2.3 The Educational System in Jordan (Historical Review)

The development of the educational system in Jordan began in 1921 with the establishment of the state of Trans- Jordan .

The new established state inherited from the Ottomans, a traditional system of education , which consisted of a limited number of religious schools, known as the “Kuttab” and several primary schools providing three years of study, and four elementary schools providing six years of study. These Schools and Kuttabls were similar in curriculum, where the Holy Koran and religious instruction were taught and no schools for girls existed.

After 1921 many public and private schools were opened for girls and boys, Later three of these schools were developed to Secondary Schools. In 1923 the first National Conference for teachers was held and the first Educational Council was formed.

1. Dept. of Statistics, (Govt of Jordan) Household Survey of 1990

During the 1930's many schools were opened in different parts of the country. In 1933 the first Educational act was legislated. The different levels in the educational system were formulated in 1939 with the elementary cycle lasting for four years. Then it was changed in 1955. With the unification of the two banks of Jordan, all the schools were placed under the control and supervision of the Ministry of Education in Amman and seven years of education were made compulsory for the first time Jordan .

During 1960's the educational sector witnessed several changes besides the quantitative expansion and improvement on the quality of education . In 1962 the educational ladder was defined to be an elementary, preparatory and secondary program and twelve years of study (6+3+3) ².

The Educational Act No. 16 was enacted in 1964 which expanded the compulsory education to nine years of study. In 1965 text books were nationalised, and since then text books were given free of cost to students on the compulsory stage and at cost on the secondary stage.

During the 1970's and 1980's the educational sector witnessed a significant progress in the development of the educational process, in the improvement of educational facilities and in the provision of educational opportunities for all segments of the population in urban, rural and Beduin areas, and schools were opened wherever ten students and over were found.

2 . MoE, The Development of Education in the H.K. of Jordan (1988-89), Report submitted to 41st Session , International Conference on Education, Geneva, 1989 , pp. 10.

During the same period, the educational plans and programs were linked with the requirements of the national plans for general development. New vocational education were introduced and many new Vocational and Training Centres (VTC) were established. In 1987 the first National Conference for Educational Development was held, which recommended a ten years development plan for 1989-1998. The compulsory educational was expanded once again to ten years and introduced comprehensive and applied secondary education for two schooling years³.

2.4 Organisation and Structures

In accordance with the provisions of the Education Act No. 27 for 1988⁴, the current educational system has the following structure :

Pre- school Education

This stage of education is not compulsory and not available in all parts of the country and wherever it exists, it is provided by private agencies.

1. The Basic Education (Compulsory)

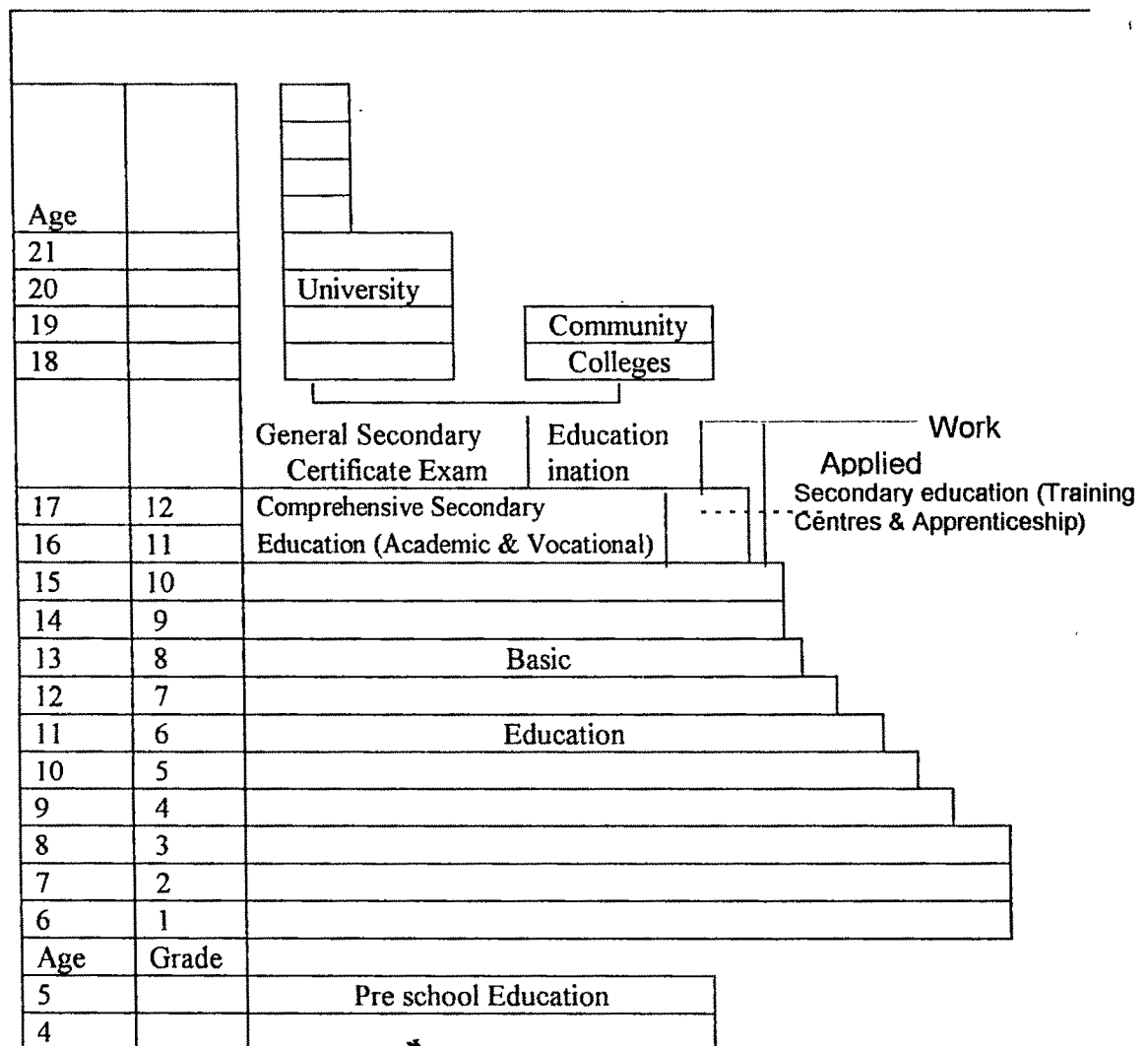
This cycle comprises nine years of education with nine grades, (six in the elementary cycle and three in the preparatory cycle), children are admitted at the first grade at the age of six years, In 1989 this stage was extended to ten years.

2. The Secondary cycle

This cycle comprises three years of education for students who have completed the Basic education successfully. Students at this stage are assigned different types of general and vocational education . This cycle was reduced to two schooling years in 1989.

3. MoE, The Development of Education in Jordan (1993-94) Report submitted to 44 th Session International Conference on Education, Geneva, 1994 , pp. 13

Chart 1
The Educational Ladder in Jordan



3. Post Secondary Education (Higher Education)

This includes community colleges -which provide two years of education for middle diploma -and the universities which provide education in various steams of fields for four years for the first university degree (i.e. B.A, B.Sc).

4. Non Formal Education

This program is available for all regardless of age or educational achievement. The main program is the evening classes for eliminating illiteracy.

2.5 Agencies of Education

There are three main agencies of education in Jordan :

1. Government Agencies

The government provide education in Jordan through the Ministry of Education (MoE) which is the main agent and the final authority in all educational decisions and has full authority over public schools and supervision function with respect to private schools.

Other government authorities include Ministry of Defence , Ministry of Public Health, Ministry of Social Affairs & Labour, the Ministry of Awqaf and Religious Affairs , Vocational Training Corporation (VTC) , Ministry of Higher Education (MoHE) and Public Universities.

The Ministry of Education provide education to 73 percent of the total students in Jordan while other government authorities provide education to one percent of the total.

2. Private Sector

Private institutions are classified into Foreign Private Institutions and Private National Institutions. All the private schools must be licensed by the MoE and must fulfill the educational aims and objectives as laid down by the Ministry of Education.

These private institutions accommodate around 11 percent of the total students in Jordan and it is using the same textbooks prescribed by the MoE.

3. United Nations Relief and Working Agency (UNRWA)

United Nations Relief and Working Agency for Palestinian refugees in the near East is an organization of the General Assembly of the United Nations. It was created in 1950 to assist Palestinian refugees after 1948 conflict with Israel.

The educational program of UNRWA in Jordan is the joint responsibility of UNRWA and the United Nations Educational Scientific and Cultural Organization (UNESCO). UNRWA is responsible for the implementation of this program while, UNESCO assumes the technical responsibility. UNRWA schools in Jordan follow the same textbooks as those of the MoE schools, and offers basic education and those students who complete the basic stage successfully from UNRWA schools and those wish to continue their secondary education have to attend government or private schools. UNRWA also provide vocational education to students in Jordan, in its two Vocational Education and Training Centers. In total it provides education to 15 percent of the total students in Jordan .

2.6 Educational Attainment in Jordan

The educational level of the Jordanian has been clearly illustrated together with that of other developing nations during the past three decades due to the consistent policy to expand the educational system.

The educational statistics of Jordan shows a remarkable improvement on school enrollment ratio among the younger population aged (6-24 years). The age groups of (6-14) years which correspond with the compulsory stage (elementary and preparatory cycle) came to have nearly full enrollment by 1970's .

The enrollment for the age group (15-18) and (19-24) years corresponding with secondary and higher education showing considerable improvement which reached 70 percent in 1982, for the age group (15-18 years) on the secondary cycle, and 21 percent of the age group (19-24 years) as compared to 3 percent in 1961 for the secondary and higher education respectively.

With the increase in school attendance among the younger population, the literacy rate among the adult population (above 15 years of age) improved a great deal during the period of 1961 to 1991 as it is shown in Table No.2.1.

The literacy rate showed only one third of the population in 1961, which was higher than many other Arab countries at the same time. The literacy rate rose to 62 and 66.5 percent in 1974 and 1979 respectively and it has reached to 83.3 percent in 1991.

The literacy rate among the age group (15-19) years was the highest among the population for all the years. In 1961 it was 54.7 percent and went up to 88.4 percent 93.5 percent and 97.9 percent in 1974, 1979 and 1991 respectively, whereas the literacy rate for the age group (20-24) years was 40 percent in 1961, it increased to 80.6, 95.3 percent and 96.7 in 1974, 1979 and 1991 respectively.

The lowest literacy rate is among the age group (50 years) and above which was 12.4 percent in 1961, and in 1979 it was 31 percent . Then it improved to 43.4 percent in 1991.

TABLE No. 2.1

Literacy Rate of Population by Gender and Age group

Year	1961			1974			1979			1991		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
15-19	54.7	75.0	34.0	88.4	94.2	82.2	93.5	97.6	89	97.9	98.3	97.4
20-24	40.0	62.4	19.0	80.6	92.9	69.8	86.9	95.3	78.7	96.7	97.8	95.6
25-29	34.2	55.7	14.4	71.7	89.8	56.4	78.0	93	64	94.6	96.9	92.0
30-39	30.6	51.9	11.4	52.0	77.5	35.0	63.5	86.4	41.6	87.0	95.2	79.0
40-49	22.4	38.3	6.9	46.6	66.2	25.5	44.9	69.3	20.0	70.1	90.4	50.5
50+	12.4	21.1	3.2	28.9	43.8	10.8	31.0	46.6	11.5	43.4	64.3	18.3
Total	32.4	50.1	15.2	61.8	76.2	47.3	66.5	81.1	51.7	83.3	90.8	75.1

Sources.

1. Multiple purposes of House Hold Survey 1961, 1974, 1979, and 1991. Department of Statistics Govt. of Jordan.

In Table No.2.2 we have given the educational attainment of population given in the population census of Jordan for the years 1979 and 1991 which shows the following :

Population with formal education (excluding literate population) as a proportion of the total population of 52 percent in 1979, this went up to 72 percent in 1991. In absolute term the population with formal educational attainment went up from 478,779 in 1979 to 1,374,040 in 1991 which means it has increased by almost three times during the period of 1979-1991.

As against this , the proportion of literate population has fallen down from 14.5 percent in 1979 to 11.2 percent in 1991 which was lower than the proportion of the population with formal education.

The proportion of population with compulsory level of educational attainment has moved up from 37.34 percent in 1979 to 41.41 percent in 1991. Out of this, the proportion of population with elementary educational attainment was 19.82 percent in 1979 which fell to 16.05 percent in 1991. As against this the proportion of population with preparatory educational attainment has moved from 17.52 percent in 1979 to 25.36 percent in 1991.

To make two census comparable we had to club two educational levels, i.e. vocational diploma and secondary education, since 1979 censuses does not provide the information separately. The growth in educational attainment of population for this level of education is very fast in comparison to what we have observed about the elementary and preparatory levels of schooling.

TABLE No. 2.2**Educational Attainment of Population 15 years and above**

Educational Level	1979	1991
Illiterate	325106 (33.5)	319480 (16.75)
Literate	140690 (14.5)	213130 (11.18)
Elementary	192437 (19.80)	306070 (16.05)
Preparatory	170302 (17.52)	483590 (25.36)
Secondary	86077 (8.86)	318860 (16.72)
M. Diploma	28464 (2.93)	151550 (7.95)
Degree	24947 (2.56)	101380 (5.32)
H Studies	3352 (0.34)	12590 (0.66)
Total	971375 (100)	1906650 (100)

Figures in parenthesis are percentage

Sources :

Department of Statistics , Govt of Jordan.

1979 -> Multiple purposes of House Hold Survey : 1979.

1991-> Population Census : 1991

In 1979 8.86 percent of the total population had secondary education. Then this proportion increased to 16.72 percent in 1991. This means that it has increased by 8 percentage points. In absolute terms, it has increased from 86077 in 1979 to 318,860 in 1991.

The proportion of population with Middle Diploma Level of Education in 1979 was 2.9 percent, then it has increased to 7.94 percent in 1991. In absolute term, it has increased by more than 5 times, i.e. it was 28464 in 1979, and increased to 151,550 in 1991.

Similarly, in case of Degree level of educational attainment, it has increased from 2.56 percent in 1979 to 5.32 percent in 1991, whereas in absolute term it has increased by four times from 24947 in 1979 to 101,380 in 1991. During the period 1979 and 1991 the proportion of population with higher studies increased from 0.34 percent in 1979 to 0.66 percent in 1991 which was almost doubled, whereas in absolute term it has increased from 3352 in 1979 to 12590 in 1991, showing an increase equal to 3.75 times from 1979 to 1991.

It is clear that the growth rate of educational attainment of Jordan's population is very fast especially on the higher educational level.

2.7 Educational Attainment of Population by Gender

In Table No. 2.3 we have given the educational attainment of population by gender which shows the following :

The proportion of illiterate females in the total population is higher than that of illiterate males. The trend in this regard as revealed by 1979 and 1991 census is interesting. In 1979, 48.25 percent females were illiterate as against 18.88 percent of the male giving the variation of 29.37 percent genderwise.

TABLE No. 2.3

**Educational Attainment by Gender and Education level
15 years and above**

Level of Education	1979		1991	
	Male	Female	Male	Female
Illiterate	92336 (18.88)	232770 (48.25)	90850 (9.18)	228630 (24.93)
Literate	88818 (18.16)	51872 (10.75)	122820 (12.40)	90760 (9.90)
Elementary	113016 (23.11)	79421 (16.46)	170320 (17.21)	135750 (14.80)
Preparatory	101236 (20.70)	69066 (14.32)	265690 (26.84)	217900 (23.76)
Secondary	53906 (11.02)	32171 (6.67)	183370 (18.52)	135490 (14.77)
M. Diploma	16304 (3.3)	12160 (2.52)	71550 (7.23)	80000 (8.72)
Degree	20361 (4.16)	4586 (0.95)	74380 (7.51)	27000 (2.94)
H Studies	2992 (0.62)	360 (0.075)	10970 (1.11)	1620 (0.18)
Total	488975 (100)	482400 (100)	989754 (100)	916896 (100)

Figures in parenthesis are percentage

Sources :

Department of Statistics , Govt of Jordan

1979 -> Multiple purposes of House Hold Survey : 1979

1991-> Population Census : 1991

After 13 years of development , the incidence of illiteracy by gender has decreased i.e. the difference in their illiteracy rate has decreased by 13.62 percent i.e. from 29.37 in 1979 to 15.75 percent in 1991. So, the relative position of females has not worsened. The co-efficiency (given in Table No.2.4) of illiteracy also confirms the above observation. In 1979, it was 2.52 which remained the same in 1991 at 2.5 percent. This means that against one illiterate male there were 2.52 illiterate females. The literacy co-efficiency computed for this purpose suggests that it has improved in favour of females. The co-efficiency for the two census years i.e. 1979 and 1991 were 0.58 and 0.74 respectively. This shows that against one literate male there were 0.58 literate females in 1979 and 0.74 in 1991. The co-efficient similarly worked out for the elementary level of education also lead us to the same conclusion. The respective co-efficient are 0.70 and 0.80 indicating relative improvement in the status of females over the time. For preparatory level of education, the values of co-efficiency of 0.68 and 0.74 for the years 1979 and 1991 respectively.

The co-efficient for secondary level of education for the years 1979 and 1991 were 0.59 and 0.74 respectively, whereas the co-efficiency for middle diploma shows a great deal of improvement in the female status at this level of education which increased from 0.75 in 1979 to 1.12 in 1991. This indicates that the number of females holding community colleges diploma has increased much faster than that of males, which is due to higher female attendance at this level of education and that is because of social and economic factors. The co-efficient for university degree level of education for the years 1979 and 1991 were 0.23 and 0.36 respectively, whereas the co-efficient for higher studies were 0.12 in 1979 and 0.15 in 1991.

In absolute terms, the number of male population with Middle Diploma has increased by 3.38 times, and that of females has increased by 5.58 times i.e. the number of males was 16304 in 1979 and increased to 71550 in 1991, while the number of females with middle diploma has increased from 12160 in 1979 to 80000 in 1991.

Table No. 2. 4

Co- Efficient of Equality of Education by Gender

Educational Level	1979	1991
Illiterate	2.52	2.51
Literate	0.58	0.74
Elementary	0.70	0.80
Preparatory	0.68	0.82
Secondary	0.59	0.74
M Diploma	0.75	1.12
Degree	0.23	0.36
H. Studies	0.12	0.15

$$\text{Co- Efficient} = \frac{\text{Total Female Population}}{\text{Total Male Population}}$$

The male population with university degree level of educational attainment was 4.5 times than that of females in 1979 which came down to 2.75 in 1991 . In case of higher studies level of educational attainment, the male population was 8.3 times more than the females population in 1979 which decreased to 6.77 in 1991.

2.8 Educational Attainment of the Labour force

Before going to the educational attainment of the labour force, we shall look at two of the major characteristics of Jordan's labour force.

These two are i) the low labour-force participation rate, and ii) extremely low contribution of women to the labour force. When the economically active population enumerated in the 1961 census is compared with the equivalent data given in 1979 census, the gross labour participation rate declined from 24.2 percent in 1961 to 21.25 percent in 1979.

The major factors for the decline in the labour participation rate are the higher dependency ratio caused by the increased fertility, the accelerated out migration of the active younger male segments of the population and the rapid increase in school enrollment among the youthful population ⁴.

4. Dr. U. Granewald, Labour Market and Education system in Jordan in Ma'an Governorate, Ministry of Municipal and Rural Affairs (Govt. of Jordan) & the Environment German Agency for Technical Co-operation, June 1981.

The same census shows that the enrollment ratio among the population aged (6-24 years) reached 68 percent in 1979 compared to 34 percent in 1961 which reflected the decline in the labour participation rates in the age group of (6-24 years).

As shown on the same census, the gross labour participation rate of the female population appreciably increased from 1.9 percent in 1961 to 3.07 percent in 1979. The rise in their participation rate is most pronounced among the age group of 20-24 years especially in urban areas. However, it must be pointed out that the female participation rate in Jordan 's labour force still remains very low.

Educational attainment is one of the most important factors which affects the participation on the labour force especially in case of female participation. Table No.2.5 shows the educational attainment of the labour force given in 1979 and 1991 census.

According to the 1991 census, around 7.65 percent of Jordan 's labour force was illiterate. Thus, 92.35 percent of the labour force was educated. If we take out the proportion of the labour force which is literate (can read & write) around 12.50 percent from the total educated labour force, then 79.85 percent of the total labour force seems to have invested in education . This proportion of labour force with educational attainment (excluding literate labour force) was equal to 46.03 percent of the total population of labour force with educational attainment. This proportion of labour force with educational attainment has increased from 60.59 percent in 1979 to 79.85percent in 1990. Thus it has increased by more than 19 percent during that period (1979 to 1991). This increase in the proportion of educated labour competes favorably with the growth of the proportion of educated population which has increased by 20 percent during the same period.

TABLE No. 2.5**Educational Attainment of Labour Force**

Level of Education	1979	1991
	Total	Total
Illiterate	67760 (18.46)	60590 (7.65)
Literate	76914 (20.95)	99010 (12.50)
Elementary	86665 (23.61)	129200 (16.31)
Preparatory	54099 (12.69)	132610 (20.53)
Secondary	40362 (10.99)	131600 (16.61)
M. Diploma	25213 (6.87)	114800 (14.49)
Degree	22000 (5.99)	33840 (10.58)
H. Studies	3078 (0.84)	10520 (1.33)
Total	367099 (100)	792170 (100)

Figures in parenthesis are percentage

Sources :

Department of Statistics , Govt of Jordan.

1979 -> Multiple purposes of House Hold Survey : 1979.

1991-> Population Census : 1991

The analysis of educational attainment of Jordan 's labour force through level of education further confirms the top heavy character of the Jordanian educational system. The proportion of the labour force with elementary educational attainment was 23.61 percent in 1979, and decreased to 16.31 percent in 1991. In absolute term, it has increased from 86665 to 129,200 in 1979 and 1991 respectively. This decrease in the proportion of the labour force with elementary level of education is reflected in the preparatory level of educational attainment. This proportion has increased from 12.29 percent in 1979 to 20.53 percent in 1991 which means it has increased by more than 8 percent .

Similarly, the proportion of the labour force with secondary level of education has increased by 5.62 percent (from 10.99 percent in 1979 to 16.61 percent in 1991). Unlike this, the growth of educational attainment for Middle Diploma and Degree level of education is higher than what we have observed in the case of Elementary, Preparatory and Secondary levels of education. The proportion of the labour force with Middle Diploma level of education in 1991 was two times that of the same proportion of 1979, the respective proportions were 6.87 percent and 14.49 percent .

Similarly the proportion of the labour force with University Degree level of education increased by 4.59 percent (from 5.99 percent in 1979 to 10.58 percent in 1991). In 1979, 0.84 percent was the proportion of the labour force with higher studies attainment, it then increased to 1.33 percent in 1991. In absolute terms, if we take the last three levels of education (M. Diploma, University Degree and Higher Studies) together, we find that it has increased by more than two times (or 216.4 percent) in 1991 (i.e 50291 in 1979 to 159,160 in 1991) forming 13.7 percent and 26.4 percent of the total labour in 1979 and 1991 respectively. This indicates that the skilled level of Jordan's labour force has improved over the period to time.

2.9 Educational attainment of the Labour Force by Gender

The educational attainment of the labour force by gender has to be studied to get an idea of the educational level between the male and female labour force. This may throw light on the formation of human capital through investment in education by gender.

Firstly, the proportion of illiterate male labour force was higher than female illiterate force. The gender-wise gap of illiteracy which was 12.66 percent in 1979 decreased to 2.28 percent in 1991 (see Table No. 2.6).

Thus, in comparison to females in Jordan 's labour force, males are more illiterate, which is due to low participation rate of illiterate females in the labour force. If we take a look at the participation rates by educational level we find it is the lowest among illiterate females.

According to the 1979 census, the proportion of literate male labour force to total male labour force was 23.39 percent and that of the females was 3.11 percent . In comparison of the proportion of the males labour force with investment in formal schooling was 58.21 percent and that of the female labour force was 90.15 percent .

In 1991, the proportion of the male labour force with investment in formal education increased to 78.72 percent , and that of females remained almost the same at 90.51 percent .The corresponding proportion for male and female literate labour was 13.33 and 3.82 percent respectively in 1991.

Similarly in 1991, 7.95 percent were illiterate male labour force and 5.67 percent was the proportion of the illiterate female labour force. As noted earlier, as against 90.15 percent educated female labour force there were 58.21 percent educated

TABLE No. 2. 6

Educational Attainment of the Labour Force by Gender

Level of Education	1979		1991	
	Male	Female	Male	Female
Illiterate	65913 (19.40)	1347 (6.74)	54610 (7.95)	5980 (5.67)
Literate	76061 (22.39)	853 (3.11)	94980 (13.33)	4030 (3.82)
Elementary	85178 (25.07)	14 87 (5.43)	124930 (18.19)	4270 (4.05)
Preparatory	42984 (12.65)	2115 (7.72)	154270 (22.47)	8340 (7.90)
Secondary	329988 (9.72)	7364 (26.88)	114420 (16.66)	17180 (16.28)
M. Diploma	15063 (4.44)	10150 (37.04)	67050 (9.77)	47750 (45.25)
Degree	18698 (5.50)	3302 (12.05)	66870 (9.74)	16970 (16.08)
H Studies	2796 (0.82)	282 (1.02)	9510 (1.39)	1010 (0.95)
Total	339691 (100)	27400 (100)	686640 (100)	105530 (100)

Figures in parenthesis are percentage

Sources :

Department of Statistics , Govt of Jordan.

1979 -> Multiple purposes of House Hold Survey 1979.

1991-> Population Census . 1991

male labourers. The former proportion was 31.94 percent more than the later in 1979, and in 1991 the proportion of educated female labour force was more than that of male labour force by 12.34 percent . This reflects the narrowing of educational distance by gender.

In absolute term, the total male labour force was 12 times the total female labour force in 1979, 6.5 times in 1991, and the educated male labour force was 7.84 times of the educational male labour force in 1979 and 5.6 times in 1991.

Narrowing of the educational level of male and female labour force may also be studied by estimating the co-efficient of educational equality for the labour force by gender. Table No.2.7 shows the value of co-efficient for literate labour force has changed from 0.011 in 1979 to 0.043 in 1991.

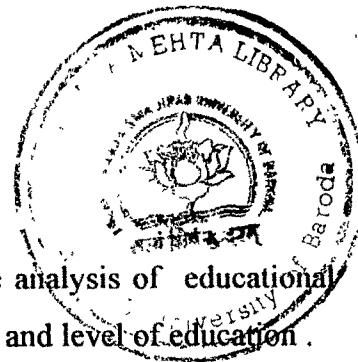
Similarly , at the elementary level of education , the value of co-efficient has changed from 0.017 to 1979 to 0.034 in 1991. For the preparatory level, it was 0.049 and 0.059 in 1979 and 1991 respectively.

The value of co-efficient for secondary education was 0.22 and 0.15 in 1979 and 1991 respectively. The highest value of co-efficient was for Middle Diploma level of education which improved from 0.67 to 1979 to 0.71 in 1991. Similarly for Degree level of education it was 0.18 and 0.25 in 1979 and 1991 respectively. 0.10 and 0.11 were the value of co-efficiency for higher studies in 1979 and 1991 respectively. This improvement on the values of co-efficient indicate the spread of education among Jordan 's labour force.

TABLE No. 2.7**Co-Efficient of Equality by Sex (Labour Force)**

Level of Education	1979	1991
Illiterate	0.028	0.11
Literate	0.011	0.043
Elementary	0.017	0.034
Preparatory	0.049	0.054
Secondary	0.22	0.15
M. Diploma	0.67	0.71
Degree	0.18	0.25
H. Studies	0.10	0.11

$$\text{Co- Efficient} = \frac{\text{Total Female Labour Force}}{\text{Total Male Labour Force}}$$



2.10 Conclusion

We outline below in brief the main conclusion of the analysis of educational attainment of Jordan ' population and labour force by gender and level of education .

1. The proportion of literate population to total population during the period of 1979-91 has declined whereas the proportion of educated population to the total has increased. This can be taken as the evidence of increasing proportion of population with formal schooling. We have also seen that the proportion of educated population to total population has increased much faster at the higher level of education (secondary and above) than that at the elementary levels of education . The stock of educated persons (with formal education only) has gone up from 52 percent in 1979 to 72 percent in 1991. From this observation, increase in number of educated persons implies to the corresponding increase in the supply of skilled labour force in Jordan's economy .
2. The ratio of educated male to female at various levels of education has improved over the period i.e in 1979, against one male with elementary educational attainment there was 0.70 female with the same level of education.. This ratio has improved to 0.80 in 1991 at the Middle Diploma , also the ratio has improved from 0.75 in 1979 to 1.12 in 1991, In other words the educational attainment by gender reveals that there is attendance towards narrowing of educational level between male and females population .
3. The proportion of educated labour force to total labour force was higher than the percentage of educated population to the total population . The former was 92.35 percent of the total labour force whereas the latter was 83.24 percent of the total population in 1991.

4. The educational attainment of the labour force by gender reveals that the proportion of educated females labour force to the total labour was higher than that of males labour force i.e. in 1979 the proportion of educated females labour force to the total was 93.26 percent and went up to 94.23 percent in 1991 , while that of males labour force has improved from 80.6 percent in 1979 to 92.05 percent in 1991. In other words the educational attainment of labour force indicate that the females labour force enjoy a much better educational attainment than male labour force.
5. The proportion of the labour force with professional educational attainment (Middle Diploma & above) has increased in absolute number by 21.6 percent from 1979 to 1992, which as exceeded the growth rate of the total labour force of 115.8 percent over the same period. This indicates an increasing demand for the skilled labour in Jordan as that proportion to the total labour force has gone up from 13.7 percent in 1979 to 26.4 percent in 1991 which indicates that there is an improvement in the skilled level of Jordan labour force.

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