

CHAPTER EIGHT

SUMMARY AND CONCLUSION

The idea that human beings are the wealth of nations was first coined by Adam Smith in his book “Wealth of Nations”. The idea did not catch up though Irving Fisher pleaded for the all inclusive concept of capital. This might be due to the powerful influence of the writings of Marshall at that time and later writings of Keynes. Marshall rejected the idea of treating human beings as capital. In Keynes writings, education as a factor in economic growth found no place as the expenditure incurred by households on anything including expenditure on education is consumption and not investment expenditure.

Adam Smith's idea was reviewed in the early 1960's by the human capital revolution pioneered by T.W. Schmalz. Since then till today the idea has gained more strength and probably for many more years to come the place of educational expenditure will go unchanged. The recent World Bank Human Development and World Development Reports are a pointer in this direction. Now a days we don't talk of development strategies simply but of Human Development strategies for the 1990's. Notwithstanding, the recent emphasis on human development the World around, no country has seems to have neglected human development. Jordan is no exception, since the launching of economic planning, through growing expenditure on education, we have been trying sincerely to promote human development.

Jordan economy is already moving towards service emphasis. Nearly 80 percent of Jordan's Gross Domestic Product (GDP) is derived from services, as opposed to more tradition production. In real terms the growth of service production has outpaced

the growth of GDP during the recent years. But, an economy where services plays a key role is an economy where education is the raw material.

It is therefore as a generator of economic growth that educational expenditure ought to be appraised and evaluated in its various aspects. However, the appraisal of the educational expenditure in Jordan is not an easy task because the statistical information relating to educational expenditure suffer from a number of limitations.

The most serious limitations from which the available data on expenditure on education in Jordan suffer is that the educational expenditure given in the regular government publications do not cover important items of educational expenditure incurred by private persons such as, books, stationary, equipments, lodging and boarding, transportation and refreshment of students. Even there is no reported information available on the private schools expenditure.

Another important limitation of the available data is that there is a large number of educational institutions overseen by different governments bodies, but most of these authorities (i.e. other than the MoE, MoHE and Public universities) do not keep a separate accounting records of their expenditure on education. Therefore, the figures of such authorities are likely to be more questionable.

Similarly, the United Nations Relief and Working Agency (UNRWA) expenditure on education in Jordan do not reflect the administrative cost at the international headquarters which would add 3 to 5 percent of the total UNRWA educational expenditure.

In view of the above, this study attempt to examine the total recorded educational expenditure in Jordan over the period 1971-1992 with the following objectives : i) The study attempt to find out the proportion of national income devoted to education and the growth behavior of the total recorded educational expenditure in terms of current prices as well as in real terms over the period of study ii) The study

will critically examine the allocation of educational expenditure according to level of education. iii) The study will find out also the proportionate shares of public, private and UNRWA expenditure on education to the total expenditures and enrollment and examine the changes in these shares over the study period. iv) The study will also examine the quality of education at a different levels on the basis of various indices used in the study. The study will review the state of educational planning in Jordan and find out how far the objectives of the educational plan could be implemented.

The Main Findings Of The Study Are Given Below

1. The proportion of national income devoted to education in 1992 works out to 11.8 percent on the basis of published figures. But, if we include private personal expenditure incurred on items other than fees, the proportion of 11.8 percent in 1992 would work out to be 18.9 percent. This still does not take into account what is sometimes referred to as the indirect cost of education namely the income forgone by students choosing not to work for wages but to study.

However, if we take into account the economic situation of Jordan and the efforts to develop education and compare it with the similar proportion of UK in 1985 which was estimated to be 5.3 percent and 6.7 percent in 1983 for the USA, we find that in Jordan we are spending on education more than what was spent by the UK and U.S.A at a far more advanced stage of economic development.

2. The increases in the proportions of national income devoted to education was attributed mainly to the phenomenal increase in social demand for education over the period not in terms of enrollment ratios but in terms of actual educational attainment both of the population and labour force in Jordan. In 1961 over 32.4 percent of Jordan's population aged 15 years and above were literate, in 1979 and 1990 this proportion was as high as 66.5 percent and 83.3 percent respectively. On

the other hand in 1979, 81.54 percent of the total labour force in Jordan was literate whereas in 1991 this proportion had gone upto 92.35 percent. Similarly, the proportion of the population with formal schooling was 52.0 percent in 1979 and rose to 72.04 percent in 1992, while that of the labour force was 60.59 percent and 79.85 percent in 1979 and 1991 respectively. Thus, the proportion of literate labour force or with formal schooling was higher than that of the population, so in Jordan the labour force is more educated than the population as a whole.

The proportion of labour force with middle diploma and above was 13.7 percent in 1979 and went up to 26.4 percent in 1991. The trends in these proportions show that the skill level of the labour force in Jordan has improved over the period.

Our analysis of educational attainment also shows that the educational distance by sex has narrowed over the period. This observation holds true separately for both the labour force and population. In 1979, the proportion of educated male labour force was 7.84 times of educated female labour force whereas, in 1991 the difference narrowed to 5.62 times.

3. The enrollment ratio of the age group 6-14 years corresponding with the basic education was 74.97 percent in 1970 and went upto 94.2 percent in 1990. At the secondary level of education the enrollment for the population aged 15-17 years was 27.54 percent in 1970 and rose to 65.8 percent in 1990, while that of the age group 18-23 years has improved from 2.6 percent in 1970 to 28.54 percent in 1990. The total number of students enrolled at different levels of education in Jordan increased from 379,797 in 1970 to 755,824 in 1980 and 1,209,763 in 1992 giving an increase of 218.5 percent or an average growth of 6.27 percent which has exceeded the growth rate of 4.3 percent of the total population in Jordan. Of the total number of students in 1970 the proportion of male students was 58.7 percent.

However, this proportion has fallen gradually to 53.6 percent in 1980 and lastly reached to 50.76 percent in 1992, as a result the proportion of female students has gone up to 49.24 percent in 1992 from 41.3 percent in 1970. Therefore, the female students ratio to male students has risen slowly to reach 0.97 in 1992 compared to 0.70 in 1970, which almost equals the female male ratio of the total population in Jordan. This can be taken to show the improvement in the awareness of parents in Jordan with regards to the importance of female education.

However, the increases in the enrollment ratio at different levels of education in Jordan confirm our earlier observation with regards to the increasing demand for education over the period of our study (which is generally the equivalent age for enrollment at different levels of education).

Comparing the enrollment ratio of the population of the age group 6-23 years in Jordan, with that of other developed and developing countries, we find that in 1990, the ratio of 73 percent in Jordan is higher than that of 50 percent in Saudi Arabia, 66 percent in Zimbabwe and 72 percent in the United Kingdom. It is clear that the enrollment ratios in Jordan is much higher than that of developing countries and it is almost as high as that of advanced countries.

4. The total recorded educational expenditure in Jordan has increased by 31.7 times over the period 1971-92. This gives an average annual growth rate of 24.2 percent at current prices. In terms of constant Consumer Price Index - where 1986 is the base year, the increase in the total educational expenditure works out to 338.4 percent or around 8.62 percent on average per annum.
5. The allocation of the total recorded educational expenditure according to level of education shows that the school education (Basic and Secondary) accounted for 75.58 percent of the total recorded educational expenditure in 1971 and it has

fallen to 67.41 percent and 62.34 percent in 1982 and 1992 respectively. As result that proportion of expenditure shared by higher education institutions has gone upto 37.66 percent in 1992 from 25.42 percent in 1971.

The information on the allocation of recurring public expenditure on education according to level of education available in World Education Report of 1993 published by UNESCO, shows that the school education in Jordan accounted for 75.1 percent of the total recurring expenditure in 1980 and fallen to 64.4 percent in 1990, and that devoted to higher education was 22.8 percent in 1980 and rose to 33 percent in 1990.

The proportion of recurring expenditure devoted to the similar levels of education (school education) in the UK was 73.6 percent in 1990 and in the USA it was as high as 75.6 percent, while the share devoted to higher education out of the recurring expenditure in the UK and USA was 19.4 percent and 24.3 percent respectively.

On the basis of the international comparison, it appears that the allocation of the educational expenditure in Jordan has been in favour of higher level of education. This has happened despite the fact that the proportion of population of the age group 6-17 years has shown a faster growth rate than that of the total population in Jordan, and it also forms a larger proportion of the total population compared to many advanced countries.

However, the paradox of the Jordanian educational scene is that while on the one hand relatively less is being spent on school education than in several advanced and developing countries, the proportion of the population aged 6-17 years attending basic and secondary schools in Jordan is much higher than that of many developing countries even it is equal to the similar proportion in UK and other advanced countries.

6. In terms of the growth of educational expenditure and that of enrollment the progress of school education was lower than that of higher education over the period. The total recorded educational expenditure incurred in school education showed an increase of 26.33 times at current prices as against 47.45 times for higher education expenditure over the same period 1971-92. The increase in the number of students was two times for school education (i.e. Basic education enrollment increased by 194.7 percent and that of secondary education was 269.5 percent) whereas that of higher education was 16.67 times.

It is therefore necessary that there should be reallocation of resources in favour of school education in particular, basic education as it is not only necessary to provide the foundation for subsequent education of any type but also the minimum essential for acquisition for skill on job where one goes straight from the school to the farm or workshop. The essential purpose which the secondary and higher education ought in our opinion to fulfill is to meet the manpower requirement of the economy. To put it more forcefully, it is the education system which should try to meet the demand of the economy for various types of trained personnel and not the economy which should be called upon to absorb different types of trained personnel that the educational system turns out.

7. During the period of our study we have instructively noted that the distribution of secondary students between general education and vocational schools in Jordan inclines heavily towards the former.

Of the total number of students enrolled at the secondary stage of education in Jordan 9.56 percent in 1970 were enrolled in vocational schools and this proportion has reached to 24.14 percent in 1992 but it is still lower than the target of the educational reform.

While the proportion of higher education students (Community colleges and Universities) enrolled in vocational streams (Agricultural and Engineering) was around 12.85 percent of the total in 1991.

No doubt over the period under study the proportionate share of vocational education of the total enrollment increased, but the re-adjustment in the educational system has been taking place slowly.

8. In Jordan the development of education is primarily the responsibility of the government. The proportion of expenditure financed by it was as high as 76.61 percent and 76.29 percent in 1971 and 1982 respectively, while in 1992 its proportion of the recorded educational expenditure was lower at 70.74 percent. The government financed 70.05 percent of the total recorded educational expenditure incurred in school education in 1971 and that financed in 1982 and 1992 was 72.48 percent and 67.6 percent respectively.

The proportion of the recorded expenditure incurred on higher education met out of government funds was 81.11 percent and 76.99 percent in 1992. This shows that the extent of subsidization in Jordan is considerably higher with regards to higher education than the school education.

9. The private expenditure which comprises private schools expenditure and private contribution to public institutions accounted for 5.78 percent of the total recorded educational expenditure in 1971, whereas this proportion has gone upto 15.31 percent in 1982, while in 1992, it was high at 22.27 percent. At the school education the private expenditure formed 6.35 percent in 1971, 13.68 percent in 1982 and 21.6 percent in 1992. The private sector provided 4.1 percent of the total expenditure incurred on higher education in 1971 and 23.31 percent in 1992. The trends in these proportions shows an increase in the role of private sector in the development of education in Jordan.

10. The United Nations Relief and Working Agency (UNRWA) schools expenditure as a proportion of the total recorded educational expenditure has declined from 17.61 percent in 1971 to 9.58 percent in 1982 and 6.97 percent in 1992. Similarly its share of the total expenditure incurred on school education has decreased from 23.6 percent in 1971 to 13.84 percent and 10.8 percent in 1982 and 1992 respectively. However, this decline has taken place due to the lack of funds for the educational budget of UNRWA where its budget is completely funded by international donors.
11. The distribution of students over public, private and UNRWA schools shows that in 1970, Public schools enrolled 70.25 percent of the total students of different levels of education, in 1982 and 1992 this proportion has gone upto 76.21 percent and 77.31 percent respectively. The private schools enrollment formed 7.72 percent in 1970 and 10.08 percent in 1992, while the share of UNRWA schools of the total enrollment was much higher than its share of the total expenditure i.e. in 1970 UNRWA schools enrollment as a proportion of the total enrollment was 22 percent, then it has fallen to 13.7 percent in 1992. This shows the distance between the quality of education provided.

At the school education, (Basic & Secondary) public schools enrollment as a proportion of the total was 70.11 percent in 1970 and it rose to 77.32 percent in 1992. Similarly, the proportion of students enrolled at private schools -Basic and Secondary has risen from 7.8 percent in 1970 to 9.23 percent in 1992, while that proportion of students enrolled at UNRWA schools has declined almost by one half i.e. in 1970 it was 22.10 percent of the total, then it has fallen to 13.45 percent in 1992.

While at the higher level of education the public institutions accommodated 86.36 percent of the total higher education students in 1971 and this proportion has fallen

to 61.32 percent in 1982, while in 1992 it has gone up to reach 77.4 percent . The private community colleges share of higher education enrollment was 4.38 percent in 1971, 36 percent in 1982 and 21.53 percent in 1992.

However, the above observation shows that the provision of education in Jordan remains the function of the government with an increasing role of the private sector in developing the education in Jordan. While the decline in the proportionate shares of UNRWA schools in the total education expenditures as well as the enrollment is an indicator that the UNRWA schools are gradually losing the grounds as a provider of the education. This can be taken to show that over the recent years there has been a gradual integration of children into regular schools. Therefore, if this trend continues, a primary policy issue will concern how such integration will take place and from where the resources will be generated.

12. In our study we have examined the progress in the quality of education in terms of per pupil expenditure and teacher pupil ratio.

The average expenditure per pupil in terms of current prices has increased by 9.23 times (or 923.5 percent) in terms of current prices and by 37.2 percent in real terms - constant prices. During the same period the per capita income has increased by 5.33 percent in terms of current prices which is lower than the increase in the per pupil expenditure over the period 1971-92. This might be taken to show that the quality of education in Jordan has improved with the improvement of the general economic standard of the nations.

Per pupil expenditure at the school education - (Basic and Secondary) where we have examined the expenditure incurred in the levels together has gone up by 8 times at current prices and in terms of constant prices the increase worked out to be 21.08 percent. This shows that over the period of our study and in comparison to the general standard of education in Jordan the quality of school education has

improved. However, this is also confirmed by the changes in teacher per pupil ratio, which has fallen by 35.94 percent at the basic schools, 22.37 percent at the academic secondary and 34.7 percent at the vocational secondary schools.

It was observed that the private schools expenditure per pupil was 2.5 times of public expenditure per pupil. Even the teacher pupil ratio at private schools was much better than that of public and UNRWA schools, which can be taken to show the superiority of private schools education. As we have instantly noted that there has been an increase in the proportion of students in these private schools which might be taken to indicate that there has been an increasing demand for good quality of education.

At the higher education per pupil expenditure has increased at a slower rate than that of school education, i.e. at current prices expenditure per pupil of higher education has increased by 208.65 % while in real terms it has declined by 58.63% over the period 1971-.92. This can be taken to show that the quality of higher education in Jordan has been deteriorating. Though the teacher pupil ratio was low at higher education institutions i.e. at public universities it was 1:19.8 and at community colleges was 1:20.53 in 1992, but this in our opinion is more indication of under utilization of teaching capacity.

In other words, though we are spending lesser in school education than what we are spending at the higher education in Jordan, the quality of school education remains superior to that of higher education.

13. Our analysis of the educational expenditures by type of management reveals that the MoE share of the total expenditure at school level of education has fallen from 88.17 percent in 1970 to 59.7 percent in 1992. This has happened despite the share of the total enrollment and number of institutions having increased over the period i.e. the MoE share of enrollment has gone up from 69.36 percent in 1971

to 76.26 percent in 1992 and its share of the number of institutions (Basic and Secondary only) was 78.26 percent in 1970 and rose to 83.24 percent in 1992 which shows that there has been an increasing demand for education at MoE schools.

It was also observed during the recent years, a decline in the proportion of recurring expenditure is the hallmark of the quality of education which has resulted in an increase in the proportion of capital expenditure, which aimed at the expansion of education to meet the increasing demand. However, the above observation with regards to change in the proportion of students enrolled at MoE and the share of MoE in the total expenditures shows that if the action is not taken, then MoE is going to face a real fiscal crisis. Our obvious recommendation in this regard is that an action must be taken to devote more funds to the MoE.

14. The share of UNRWA in the total enrollment , expenditures and total institutions has decreased over the period, while the increase in enrollment was much higher than the institutions which caused an increase in the number of students per school where it was double the size of MoE schools. Even the quality of education provided by UNRWA schools was below the average in Jordan, which is confirmed by the decline in per pupil expenditure in real terms.
15. Public universities expenditures has increased by 83.9 times in terms of current prices and its enrollment has gone up by 15.07 times. However, these growth rates of enrollment and expenditures has exceeded that of other levels of education.
16. The other government authorities and educational institutions seemed to be much better equipped than the MoE schools which is shown from their per pupil expenditure which was almost that of MoE, while some other government community colleges expenditure was almost equal to that of public universities.

On the basis of the findings of the study regarding the growth behaviour of expenditure and enrollment we estimate the following points which might be useful for future planning.

1. Enrollment in all educational levels of education in Jordan can be expected to grow over the next decades. i) at the basic education the enrollment is expected to increase due to the population growth, however if the present average growth rate at the population of 1.6 percent remains the same that means that over the 10 year period the basic education enrollment is going to increase by 16-18 percent, and here we are not assuming an increase in enrollment due to the expansion of education because the enrollment for this age group is already high and at any case it is not expected to reach 100 percent. ii) at the secondary stage we are assuming that the enrollment ratio for the age group 16-17 years will improve over the next 10 years due to the improvement of the transition rate from basic education to secondary. However, if the enrollment improves to 80 percent this can lead to an additional increase of 12 percent in the total number of secondary students. iii) at the higher education the enrollment is expected to be much higher than that of basic and secondary education.
2. The increase in enrollment at different levels of education will mean additional funds to be devoted to education, but the present situation and the future estimation of the behaviour of the Jordanian economy shows it will not be possible to raise more funds more than what have been already raised. In this regard we suggest several categories of options such as cost recovery, restructuring the educational system towards more locally controlled and financed system, proper use of teaching capacity of teachers and reducing the level of education wastage caused by drop out and repetition rates.

3. The projected increase in enrollment according to educational authorities continue to show that over the next 10 year period the public schools share of basic education students is going to decline 67 percent by the year 2002, while that of the secondary education is going to decline marginally. However, it is also expected that by the year 2002 the private schools enrollment as a proportion of the total is going to rise almost one fourth and at the secondary education it is expected to increase marginally by 9 percent of the total.

But it is constructively estimated that the share of UNRWA schools of the basic education will decline by less than 10 percent of the total within the next 10 years period.