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A Descriptive and Explanatory Case Study of the Expansion of the Educational System in Jordan 1950-1980

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A DESCRIPTIVE AND EXPLANATORY CASE STUDY OF THE EXPANSION OF THE EDUCATIONAL SYSTEM IN JORDAN 1950-1980

by

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VITA

The author, Rushdi Yousef Qawasmeh, is the son of Yousef Mohammad Irshid Qawasmeh and Halemeh Qawasmeh. He was born December 27, 1950, in Hebron, Palestine.

His elementary education was obtained in the United Nations Relief and Welfare Agency's (UNRWA) schools in Ramtha, Jordan. His secondary education was completed in 1969 at Ramtha High School, Ramtha, Jordan.

In September, 1969, Mr. Qawasmeh entered Jordan University, receiving the degree of Bachelor of Arts in Sociology in June, 1973. After working for three years as a social worker in Libya, the author travelled to the United States of America to pursue his higher education. In 1978, he entered Roosevelt University and received the degree of Master of Arts in sociology. in September, 1981. In 1982, the author entered Loyola University and received a Ph.D. in Education in May, 1986.

DEDICATION

To my loving wife, Antoinette

and

my parents, Yousef and Halemeh Qawasmeh,

I dedicate this dissertation.

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CHAPTER I

THE LAND AND ITS PEOPLE

A BRIEF HISTORY

While Jordan's publications relate to its history as a modern nation, Jordan in fact is as old as history itself. Two villages in Jordan - Jericho in the Jordan Valley and Beidha near Petra - are each almost 10,000 years old and believed to have been the world's first communities.[1]

According to early recorded history, the Edomites established their kingdom in the area of Jordan in the 17th century B.C. A later important kingdom that flourished in Jordan for centuries was that of the Nabataean Arabs, whose capital was Petra, still as magnificent now as it was then, and whose domain stretched north as far as Damascus (Syria).

In modern history the events leading to Jordan's emergence as a sovereign, national entity are linked with the Arab struggle that began in the late 19th century for freedom from 400 years of Ottoman rule. Arab aspirations for independence became a unified force during World War I; the common objective was Arab unity and independence, not only from the Ottomans but also from foreign domination of any kind. The Greater Arab Revolt, which was proclaimed in 1916 under the leadership of Sharif Hus-

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[1] Akram Z. Barakat, "Jordan in Focus," Jordan, Summer/Fall 1981, 6:2, p. 16.

sein Ibn Ali of Mecca, King Hussein's great-grandfather, achieved victory alongside the Western Allied forces in 1918.

However, the British promise of independence, pledged to Sharif Hussein in 1915 in return for Arab military support during the war, was nullified in 1916 by the British and the French in their secret Sykes-Picot agreement, which divided the Ottoman domains of Syria, Lebanon, Iraq, Palestine, and Jordan between the two powers. In 1920, Jordan, Palestine, and Iraq were placed under British mandate, but in 1923, Jordan succeeded in securing British formal recognition as the independent Emirate of Trans-Jordan with Emir Abdullah, the son of Sharif Hussein, as its leader.

Jordan achieved full independence at the end of World War II, when the British mandate ended. On May 25, 1946, the Hashemite Kingdom of Jordan was proclaimed a sovereign independent state, with Emir Abdullah as king.

On May 14, 1948, the establishment of the state of Israel was declared. The following day Jordanian troops entered what was to become the West Bank of Jordan on April 24, 1950.

King Abdullah was assassinated on July 20, 1951. It was said that the assassin was part of a larger plot conducted by Palestinians concerned about the King's motives in the West Bank and especially about his secret negotiations with the Israelis.

King Abdullah's oldest son, Prince Talal, was immediately crowned king. He had long suffered from mental illness, however, and was shortly removed from the throne by a vote of both houses of parliament on August 11,1952. Prince Hussein was then declared king. Today he is still the king of the Hashemite Kingdom of Jordan.

GEOGRAPHY and POPULATION

Almost a landlocked country, Jordan is bordered on the west by Israel, the north by Syria, the east by Iraq, and the east and south by Saudi Arabia. Jordan also enjoys a 16-mile coastline on the Red Sea, the focus of which is the port of Aqaba. As to size the East Bank is about 35,000 square miles. The West Bank (which is separated from the East Bank by the Joradn River and the Dead Sea) covers about 2,100 square miles.[2]

Structurally, Jordan may be divided into two main parts: a mountainous vaulted region in the west, and a flat desert in the east. The western part, known as the West Bank, is characterized by the straight incision of a rift valley between two blocks of highlands. The height of each block varies from 2,000 to 3,300 feet above sea level, while the Ghor (grove) lies at an average of 990 feet below sea level. The West Bank, however, contains most of Jordan's cultivated land. In contrast, more than four-fifths of Jordan's East Bank region is desert.[3] Agricul-

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[2] Peter Gubser, Jordan: Crossroads of Middle Eastern Events (Colorado: Westview Press, Inc,1983), p. 5.

[3] Raphael Patai, Jordan, Lebanon, and Syria (New Haven, HRAF Press, 1957), p. 18.

ture is impossible in most of the region and only nomadic tribes can find subsistence.

Population

The constant movement of the people in Jordan makes it very difficult if not impossible to conduct an accurate count of the population in that country.[4] In the November 1979 census, it was decided that only individuals residing in the East Bank and those absent from the East Bank for one year or less would be counted. Using these rules, the census came up with 2,132,997 Jordanians.[5] In this count, two distinct groups were not counted. The first were the people who live on the West Bank (approximately 850,000), and the second were the hundreds of thousands of Jordanian citizens (the majority of whom are Palestinians), who live outside Jordan and have done so for more than a year.[6]

The natural growth rate, as figured by the Jordanian Statistics Bureau, was 3.4 percent, a high rate by world standards, but certainly matched by some other developing countries. The growth rate had actually increased from the 3.1 percent rate that prevailed in the 1960s and from

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[4] This population movement takes at least two forms: first, the constant migration of the people from rural to urban areas, and second and most important, the out- and in-migration (more out than in) for labor purposes.

[5] Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/1983. p 1.

[6] This number of people is estimated to be around 400,000 residing mostly in Kuwait, Saudi Arabia, United Arab Emirates, and other oil-rich countries; others are scattered around the Arab world, Europe (especially West Germany), and the United States of America.

the even lower rate in previous decades due to the broad improvement of health conditions.

The natural growth rate, however, by no means accounts for the present Jordanian population (the latest estimation for 1983 was 2,495,000). It could be argued that the major population shifts have resulted from warfare in the region and not from the natural growth rate.

The earliest East Jordan population figures were based on estimates by tribal chiefs which put the population at the 225,380 mark in 1922. By the late 1930s the estimate (by the provincial governers) had grown to 300,214 but by 1946 the estimate on the basis of identity cards was 433,596.[7]

The 1948 Arab-Israeli war radically changed this population picture. To the modest population of four hundred thousand plus souls were rapidly added about four hundred thousand Palestinians who were residents of and remained on the West Bank and around four hundred and fifty thousand Palestinian refugees who fled the newly founded Israeli state.

The next big population shift occurred with the June 1967 Arab-Israeli war and the loss of the West Bank to Israeli military occupation. It is estimated that two hundred sixty-five thousand came from the West Bank and another forty-five thousand came from the Gaza Strip to live in the East Bank of Jordan. From 1968, the flow from the West Bank to the East Bank (and often on to the Arabian Gulf) continued at a rate varying

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[7] Munib al-Mady and Sulayman Musa, Tarik al-Urdun fi al-Qarn al-Ishrin (History of Jordan in the Twentieth Century) (Amman, 1959),pp. 311, 448.

from two to three thousand up to the 1981 level of more than twenty thousand per year.[8]

The effect of these radical population shifts was to triple the population in 1948 by the inclusion of a sizable number of refugees as well as the West Bank indigenous population. Correspondingly, the population shifted from one characterized by a vast majority of East Jordanians to one with a strong majority of Palestinians. No longer was Jordan a small, overlooked emirate; it had become instead a small kingdom central to the Arab-Israeli controversy.

NATIONAL and MINORITY GROUPS

For the outside observer, Jordan looks like a country with only one group of people, namely Jordanians, but a closer look at the people in Jordan results in identifying a series of partially overlaping groupings of mixed national, cultural, social, and economic nature.

The national and cultural differentiations (the subject of this section) are represented by the Palestinians and the Jordanians. Other distinctions could be drawn between Muslims and Christians, for example, or Arabs and non-Arabs i.e. Circassians, Shishanis, Armenians. Also and to a lesser extent distinctions could be based on lifestyle and type of residential pattern, namely nomadic bedouin, villagers, refugees of the camps, and urban dwellers, in addition to the socioeconomic divisions which are most starkly found in the urban areas.

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[8] This data is not totally accurate. The numbers are believed to be much higher.

Although a number of groups could be identified in Jordan, the distinction between the Palestinians and the East Jordanians constitutes the most notable one. The remainder of this section will give insight into this issue.

The Palestinians

Strictly speaking, Palestinians are Arabs who live or have lived in the area now consisting of Israel, the Gaze Strip, and the West Bank, all of which was once called Palestine. The largest number of Palestinians still remain in that territory: An estimated 850,000 in the West Bank, 447,000 in the Gaza Strip, and 574,000 in Israel. Many more live in neighboring states such as Jordan 1,100,000, Lebanon 300,000, Syria 200,000, Saudi Arabia 50,000, and the Gulf States 75,000. Other Palestinians are spread from Libya to the Arabian Gulf. There are also an estimated 50,000 living in Europe and an additional 60,000 in the United States of America.[9]

Prior to the 1948 Arab-Israeli war, there were solely East Jordanians in the Emirate of Jordan. As mentioned earlier, one of the major consequences of this war was the incorporation of the West Bank into Jordan and the granting of citizenship to all residents of the West Bank as well as to the Palestinian refugees who found themselves in the East and West banks after the war.

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[9] Although these numbers are certainly not "precise" estimates of the total population, they are the latest and most authoritative data available.

Certainly not all Palestinians can be characterized in this manner, but it may be said that a high proportion of them have fundamentally different national aims from those of the East Jordanians. Meanwhile, the latter focus on the East Bank and wish to see its economic and social development; the Palestinians' national aim is to regain part or all of Palestine for a homeland. This is especially true for those in the camps and those who came to Jordan during or after the 1967 war. According to Peter Gubser, cultural, educational, and social differences existed between the Palestinians and the Jordanians in the early years and that left a legacy thirty years later.[10] East Jordan of 1948 was predominantly rural. The people lived in villages or bedouin tents; a few small towns existed at that time which had only five to thirty thousand people and very few urban characteristics. In contrast, Palestine had a decidedly urban sector. Daniel Lerner, in his book, The Passing of Traditional Society, pointed out that 50 percent of West Bank Palestinian children attended school while only 20 percent of the East Bank children did.[11] Similarly Palestinians had proportionately three times as many doctors and East Jordanians suffered from an infant mortality rate 50 percent higher than that of Palestinians.

Despite these contrasts, many mutual ties and relationships exist between the two groups. These ties involve frequent contact, marriages, and trade. On a broader level the two groups are part of the same Arab

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[10] Peter Gubser, Jordan: Crossroads of Middle Eastern Events (Colorado: Westview Press, Inc, 1983), p. 15.

[11] Daniel Lerner, The Passing of Traditional Society (New York: Free Press, 1958), p. 306.

culture, speak a very similar dialect of Arabic, and for the most part adhere to the Sunni branch of Islam.

The evolution of the Palestinians in Jordan to date has created distinct internal divisions with respect to their perception of and relationship to Jordan. Palestinians in Jordan could be divided into at least four groups. First, there are those who came to live in Jordan prior to 1948 and they identify themselves as Jordanians. For the most part they prospered commercially, professionally, and in government services. The second group are the 1948 refugees. This group consists of the majority of Palestinians in Jordan and the same could be said about them. They live in cities and towns especially around Amman, the capital city, and they enjoy considerable success in many aspects of life. The third group are the non-camp residents who migrated to Jordan in 1967 after the Arab - Israeli war. They could be characterized by a strong loyalty to Palestine and somewhat more militant than the first or the second group. The fourth group are the refugees. They are a mixture from both 1948 and 1967 and still live in the camps. Those people could be described as disgruntled, unsettled, despondent, militant or potentially so, just to name few. They are the residents of the camps, in which a whole generation has been born, brought up, and is now starting to bring up a second generation. These also are the people most dependent on the U.N.R.W.A. for housing, rations, schooling, health, and welfare services.

Despite these differences, with the exception of the first group, the vast majority identify themselves as Palestinians and have a fundamental

attachment to their land, be it the West Bank or the land of Palestine as a whole.

RELIGIOUS and ETHNIC MINORITIES

Officially no minorities exist in Jordan. In 1951, the Jordanian government's notice to UNESCO stated that " there are no minorities in the Hashemite Kingdom of Jordan, and all Jordanians, whatever the differences in origin, religion, or language are equal before the law".[12] Despite this statement by the government, minorities in the accepted sense of the word do exist.

There are Christians who form an ancient community in Jordan. They could be found in significant numbers in the East as well as in the West Bank of Jordan. Although their actual numbers are not known, the most recent estimates put them at 125,000 in the East Bank,[13] of which a little less than two thirds are Greek Orthodox, about one third Greek Catholic, and the balance are Roman Catholic with a few hundred Protestants, Armenians, and Syrian Orthodox.

The internal organization of the East Bank Christians has two aspects. First, the churches form a framework, admittedly divided, for Christian organization and communal activity. Each sect has courts that are responsible for personal status law, which involves questions of

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[12] Raphael Patia, The Kingdom of Jordan (Princeton,N.J.: Princeton University Press, 1958), p. 22.

[13] R.D. McLaurin (ed.), The Political Role of Minority Groups in the Middle East (New York: Praeger Publishers, 1979), p. 274.
* No estimates are available for the West Bank.

marriage, divorce, inheritance, and the like. Second, and this is a unique case in Jordan, some Christians are organized along tribal lines very similar to those of their Muslim brothers. This combination of the tribal system with the highly structured and organized nature of the church gives them a greater group cohesiveness than the Muslims.

With respect to education, Christian missionaries, set up schools in the 1870s and 1880s in some areas in East Jordan. These are private Christian schools, but certainly, Muslims were and are welcome to attend them. Despite this fact, it has been argued that Christians have definitely benefited more from them, attaining a higher educational standard than their Muslim counterparts. It should be noted here that although this situation might have been true in the past, it is no longer the case because of the rapid development and expansion of state education which makes schools and education available to everyone.

Relations between Christians and Muslims have generally been cordial and close. Social visiting is quite common, as is participation in each other's religious ceremonies. They continually express their mutual tolerance for one another and are quite proud of their good relations as compared with those in the rest of the Middle East.[14]

Beside the Christians the only significant ethnic minorities in Jordan are the Circassians and the Shishani, who number twenty-five thousand and two thousand respectively. Although these two groups speak dif-

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[14] Peter Gubser, Politics and Change in al-Karak, Jordan (London: Oxford University Press, 1973), p. 62.

ferent Caucasian languages, they are both Muslims.[15] They moved from Caucasia to the area (which was part of the Ottoman Empire then) in the 1880s. They were encouraged to settle in what was to become East Jordan by the Ottoman Empire, and they assisted the empire in keeping communication lines open, and they provided a counterbalance to the bedouins who were, a strong force at that time.

Today the Circassians and the Shishanis are politically assertive as a group. Nevertheless, they enjoy a disproportionately high number of positions in the government, military, and security forces. This is due to the fact that they are very loyal to the Hashemites, and also and most probably to their minority status.

Like the Christians they have seats in the parliament and many have served in cabinets but the notable difference is they can serve as prime ministers in the government and the Christians cannot.

The CULTURE and the SOCIETY

In his book, The Jordanians and the People of Jordan, Kamel Abu Jaber draws the two salient themes in the culture of the country.

> First, culturally our people waver between what is and what was. The past, glorious as it was, rightly holds its own attractions, but the present has just as good attractions and the future holds limitless ones. A person's soul is torn between all these possibilities and probabilities. That is why it is not uncommon to find in the same person several cultural personalities. The mood may be oriental, western or somewhere in-between and one is responsive to all these moods; not out of blind or superficial imitation, but because of a genuine appreciation of both the traditional and the new. It is thus that every Jordanian lives in a variety of worlds; old and new and

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[15] Circassians are Sunni Muslims like the rest of Jordanian Muslims, meanwhile, Shishanies adhere to the Shiat sect, like those in Lebanon, Iran, or Iraq for that matter.

> in-between. The choice and diversity is bewildering and rich....Second, Jordan is an extension of the surrounding Arab culture. In a way, it is part and parcel of that culture, and thus difficult to differentiate from it except for the very discriminating and the discerning. Yet in fact local variants do exist.[16]

These cultural variations are contributed by the various minorities living in Jordan. Thus, Assyrians enjoy distinctive food and music of forgotten times; Circassians have their own dances and quite different modes of dress; and Christian churches carry on centuries-old chants and rituals. All of these minority cultural practices are virtually identical to those of brother minorities in neighboring countries. Many of the traditional crafts are basically imitative of ancient patterns, open to little or no innovation.

The past, present, and future of which Abu Jaber spoke of are most strongly represented for the outsider by clothing, the visual, music, and the audible. However, less evident to the outsider is the most rigorous of Arab Cultural forms, the literature of the prose, poetry, and conversation.

In summary, Jordanian culture, like that of many developing countries, is an evolving mixture of the old and the new as well as of East and West. The result is a workable whole that gives Jordanians the oppottunity to live and express themselves in a variety of modes. This culture is distinctly part of the larger Arab culture, drawing richness from it as well as donating traditional and modern contributions to it.

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[16] Kamel Abu Jaber, "The Jordanians and the People of Jordan," unpublished 1980 manuscript(due to be published by the Jordanian Royal Scientific Society), p. 80.

Family and Family Life

The family is at the core of Jordanian life. The Jordanian family has similarities with family life throughout the Arab world. Prior to urbanization, education, and economic independence, the extended family -the hamulah or the asheerah- as the people call it, was the dominant factor. Today this kind of extended family is only relevant in terms of ceremonies, and in some cases, blood feuds. In blood feuds where mutual protection is invoked and the asheerah called upon, the rule is that of the khamsah,"the group of five."[17]

Each man is identified as belonging to his father's not to his mother's family. However, the mother's family is important for identification and people usually take after the maternal uncle rather than the paternal uncle. In the countryside and among the bedouin (nomads) a man married a woman not for her beauty, education, or because he loves her, but because she come from a family with good reputation and hopefully will bear fine children. There is a popular saying: "Two thirds of the boy takes after his khal (maternal uncle)."

The father's role is that of a patriarch presiding over family affairs. The mother tells the children: "Whatever you do, don't anger your father." He is often referred to as the rabulailah (lord of the family). Although women take a secondary role in the family, she is

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[17] The khamsah means that a man embraces all his patrilineal relatives within five degrees of relationship. The theory being that if a person takes a stick with his five fingers it is difficult to take it away from him.

referred to as rabatul-dar (lady of the house). Preference in marriage is for bint al-am, the daughter of the father's brother or failing that, a cousin on the father or the mother's side.

The family is all important. A man without a family is likened in Arabic to a limb cut off from a tree. The cellular family still maintains a strong hold although the influence of the extended family has waned. Some have found fault with the working of the Arab family. Professor Hisham Sharabi, for instance, maintains that it instills in the child a sense of dependency, lack of self-reliance, weakness of character and feeling of shame and guilt. These factors can be positive, however. Shame for a misdeed must generally be good and reconciliation and compromise can be valued characteristics. Again, some say the father is a tyrant whose children tend to hate him and identify more with the mother. This may appear true in light of the seemingly patriarchal family structure. The mother is often over-protective of her children and passionate in expressing her love for them. The father, meanwhile, is expected to be head of the house, the bread winner and the liasion with the outside world, projecting a certain distance between himself and his children. The father protects his family and emphasizes his duties. The wife is always deferred to and her opinion is often crucial and final. She has a say in her child's marriage and it is she, in most cases, who maintains the family cohesion.

The extended family composed of first, second, and distant cousins is an outer circle of relationships. There may be quarrels with the family and cousins but solidarity is maintained against the outside world,

adhering to the popular saying, "My brother and I against our cousins, and our cousins and we against strangers." People understand and tolerate nepotism although they may not like the end result. However, the practice is becoming less common with education and the emergence of the merit system.

Sexual discussions are avoided within the family. The topic is wrapped in veils of mystery. Modesty is highly valued among males and females. Children must discover as best they can the mysteries of sex. Polite people never speak of it. A person who talks about sexual matters openly is referred to as qalil al-haya (having little shame). As a result, sexual segregation is a future of Jordanian society as in the most of the Arab World.[18]

Jordanian families expect their sons and daughters to marry and have children. The social pressures on the woman to marry are more pronounced than they are on men. Twenty years ago most women married in their mid or late teens. Unmarried women over twenty tears old, were considered well on the way to becoming old maids. Nowadays with increased higher education and employment the age for marriage has risen and many women do not marry until their mid or late twenties.

Birth is one of the happiest family occasions particularly if the child is male. The male child is usually named after his paternal grandfather and the female after her grandmother. Another happy occasion is the fitam or weaning of the child which is celebrated with food, singing

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[18] This phenomenon is changing, especially in the middle and upper class urban families.

and dancing. In Muslim families the other most important occasion is the tahur (circumcision). For Christians it is usually baptism. Both are usually celebrated with dining, singing, and dancing.

Almost every celebration is represented by food; To break bread and salt with someone is to seal a friendship with something almost ritually sacred, not simply for the sake of eating, as eating itself is considered a private affair. One eats with joy and relaxation only with friends and love ones. This is why until quite recently it was considered bad form for people to eat in restaurants.

Death is recognized as God's will and "a continuation and part of life" in Jordan. To honor the dead, the body should be buried the same day if it is all possible. Certain cermonies have to be observed. The women must wear black; in the past for one or more years but now for 40 days. The one-year period of mourning still applies to the wife of the deceased. Everyone is expected to grieve and not seek any kind of enjoyment until the period of mourning has passed.

HEALTH CARE

The number of general practitioners and specialists in the urban sectors are more than adequate, both at the Health Ministry's hospitals and at private clinics. However, the situation is very different elsewhere, since most doctors and specialists prefer to live and have their private practices in urban areas.

Health Ministry statistics indicate that Jordan had 2,175 doctors in 1981, or one for every 990 people. The number of specialized doctors in the same year was 813. But many Jordanians are studying medicine, both at home and abroad, and by 1985 the number of doctors is expected to reach 4,675 (one for every 544 citizens).

There is a severe shortage of trained nurses and midwives. There are only 230 Jordanian-registered midwives and 904 nurses in 1981. But the government is encouraging young Jordanian girls to take up nursing, as an increasing number of parents are agreeing to this and old prejudices against nursing as a respectable profession are being eroded. The University of Jordan's faculty of nursing offers a BSc in nursing and the Jordan College of Nursing at the Hussain Medical Center offer diplomas in nursing and midwifery. It should be noted here that many hospitals employ foreign nurses. There are about 200-250 foreign nurses working in Jordan.

The Health Ministry runs hospitals throughout Jordan, as well as 88 health centers, 283 village clinics and 63 mother and child care centers to provide primary health care. It also runs 43 dental clinics and 18 centers for the treatment and prevention of chest diseases, particularly tuberculosis.

Government hospitals and clinics provide services to all Jordanian citizens at very low prices. The fee for a routine medical examination at a village clinic is JD 0.300. An examination by a specialist costs JD 1. A minor operation at a government hospital costs JD 10, while a major

one will cost JD 30. Fees charged for for a normal delivery are JD 8.[19]

Fees charged by private practitioners and private hospitals are much higher, but the services rendered by the private sector tend to be more efficient. A list of fees issued by the doctors' professional association in 1980 specifies that the minimum fee for a visit to a general practitioner is JD 1 and the maximum JD 3. The minimum fee charged by specialized doctors is JD 3 a visit and the maximum JD 5.[20]

Health Benefits

The civil service health insursnce regulations enacted in 1979, provide for a free medical treatment at government hospitals and clinics for all civil servants. A government health insurance fund to finance this scheme exists and participation is compulsory for all civil servants and employees of public sector institutions which qualify for the scheme. Beneficiaries are charged a monthly fee, amounting to 1 per cent of their income, on condition that the fee does not exceed JD 3. Dependent family members of each beneficiary are exempted from 70 per cent of fees. Citizens classified as "destitute" by a special case study by the department of Social Affairs receive free medical treatment at government hospitals and clinics without paying any money to the government health insurance fund.

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[19] JD 1 = $2.50.

[20] Private hospital and private doctors' fees increased by 25-35 per cent as of September 1982, so it should be borne in mind that fees listed here may now have increased by as much as 35 per cent.

The Health Ministry is expanding its services to school children by providing as many schools as possible with periodic medical check-ups. In 1980, 23.9 per cent of school children received check-ups.

As for community health, the Ministry of Health co-ordinates with various municipal authorities. The Amman Water and Sewage Authorities and the Agriculture Ministry are monitoring sewage disposal procedures, drinking water resources and water used for agricultural irrigation. It is ultimately up to the health minister to decide whether or not water resources are fit for drinking or irrigation purposes. Monitoring of water resources has become very strict as a result of the outbreak of cholera which threatened to reach epidemic proportions in the summer of 1981. The outbreak was brought under control, and studies have shown that cholera is not endemic in Jordan. No cholera cases were reported during the summer of 1982. Drinking water directly supplied by the municipality is well-chlorinated and safe for domestic consumption, and boiling drinking water is unnecessary in Jordan.

RELIGIONS

Although there are few religious minorities in Jordan,[21] more than 90 percent of the population adhere to the Islamic faith, and virtually all follow the Sunni (as opposed to the Shiat) school of Islam. For this reason the rest of this section will be devoted to explain the Islamic faith.

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[21] see Religious and Ethnic Minorities

Islam

> "God is most great. I testify that there is no god but God (Allah). I testify that Mohammad is the Prophet of God. Come to the prayer. Come to salvation. Prayer is better than sleep, God is most great, there is no god but God."

This Islamic call to prayer is made five times a day - only the dawn prayer includes the phrase "Prayer is better than sleep"- each phrase is repeated twice. To do this the Muslims chose the simplest instrument of all, the human voice (unlike the bells of Christianity or the horns of Judaism).

Islam is the Arabic word meaning submission implying man's duty to submit himself to worship and obey the God of Abraham. The profession of faith, or Shahada, "I testify that there is no god but God and Mohammad is the Prophet of God" is the first of the five pillars of Islam. They are the first words to greet the newborn and the last to be uttered at the grave.

When in the early seventh century AD, the Prophet Mohammad called on the people of Mecca to turn away from the pagan goddesses they worshipped and submit to the one true God of Abraham, he was speaking of the same one God of Judaism and Christianity. Muslims, therefore, do not regard God as separate from the God in the Torah or the new Testament. Their principal disagreement with Christianity is in their rejection of Jesus Christ's divinity. The Quran says: "He (God) was neither born, nor gave birth to anyone."

The Quran is God's word spoken to Mohammad in Mecca and Al-Madinah in the seventh century AD. Muslims consider it the uncreated word of God and the greatest of God's miracles. In Islam, the spiritual and temporal world are not separated. Rules for man's spiritual and temporal behaviour are clearly laid down in the Quran and the Hadith (the Prophet's spoken words). Muslims also believe that everything in a man's life can be guided by Islam.

The Five Pillars of Islam

The religious duties of a Muslim center on the five pillars (arkan) of Islam. The first is the Shahada (the profession of faith); the second is salah (prayer). A Muslim must turn towards Mecca and recite the prescribed prayer five times a day: at dawn, midday, mid-afternoon, sunset, and nightfall.

In Jordan, whether in the mosque, on a carpet in front of a grocer's shop, beside a convoy of lorries in the desert, at home, or any other place , the believing Muslim will stop work, check his bearing on Mecca, line up with his companions (if there are any) and perform the prayer.[22] The most important prayer in Jordan as well as in all Muslim world is Friday prayer. It includes a sermon (khutbah) delivered by the prayer-leader (imam) from the pulpit (minbar) of the Mosque.

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[22] In Saudi Arabia for example, the Government employs people (police) to go around and make sure that everyone goes to the Mosque and prays when it is time. Force is used sometimes.

The third pillar is almsgiving (zakat). The zakat has developed from a voluntary act of love and charity towards the poor, to an obligatory property tax destined for the needy.

The fourth pillar is fasting. Every Muslim must fast during the holy month of Ramadan from dawn to dusk.[23] Ramadan commemorates the month during which the Quran was first revealed and in which Mohammad's followers were victorious over the people of Mecca at the battle of Badr. It varies according to the cycle of the moon. The fifth, and last pillar is the pilgrimage to Mecca (the Hajj). Every Muslim who can afford it, and who is fit enough, must make the journey at least once in his life.

Lastly, Islam sees itself as a religion of mercy and love. Indeed, the opening phrase of the Quran - and one of the most commonplace expressions used by Muslims- is "B'ism illahi ar-Rahman ar-Rahim" (in the name of God the Merciful, the Compassionate). As in Christianity, the only unforgivable crime in Islam is the abandonment of faith.

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[23] There are of course some exceptions. Among these are: travelling more than 80 kilometers a day, sickness, under the age of seven, if the women has her menstrual period or if she is pregnant and can not fast being afraid that she might harm the baby, or any other acceptable reason.

VALUES and PATTERNS of LIVING

Traditional Values

Except for the Christian minority, Jordanians-nomads, villagers, and urban dwellers alike share a common heritage of Islamic values. It could be argued that the Quran and the Hadith (Mohammad's spoken words), together with their interpretation by religious leaders, form a comprehensive guide for life which has given coherence to the social units in the country of Jordan as well as in most of the Arab countries for that matter. A major function of the Islamic society is to protect its members from their frailty, teaching and disciplining them to submit themselves to the will of God.

In traditional Islamic society social life was so minutely regulated by religious precepts that social values were largely indistinguishable from religious values. An important consequence of traditional Islamic regulation of virtually all aspects of life has been the tendency for Jordanians, like other Muslims, to adjust and to accept life rather than to attempt to manipulate it or experiment with it. The commonly quoted Quranic phrases "it is written" and "it was willed by Allah" symbolize attitudes toward the value of human endeavor which Arabs have held (and to some extent still hold) for centuries.

The primary role of the family in Jordan, in the lives of its members, not only in childhood but throughout life, puts it at the center of some of the most deeply felt values and loyalties. It could be argued

that the type of occupation to which a man may aspire, his standing in the community, and his range of choice in selecting a wife are all determined by the relative wealth, power, and prestige of the family. Family honor must be safeguarded, even at the risk of life. Strong family loyalties also enable the Jordanian, like other Middle Easterners, to adhere to separate standards of conduct and morality in dealing with relatives and outsiders. Within the family certain norms of obedience and industry are required; outside the family however, different standards of behavior and honesty may prevail.

Among the nomads, mutual obligations and loyalty go beyond the family and extends to the larger kin-groups and to the tribe as a whole. For settled Jordanians larger kin ties are less binding, but they usually come to the fore in the face of outside threats.

Traditionally, wealth is considered as one of the most important avenues to social status, and still correlates to a high degree with leadership. The possesser of wealth, as one who had received the blessing from God, was once -and to a degree still is- expected to display and use it in a manner designed to glorify God by benefiting others. If most often in practise this meant luxurious living, it also took the form of almsgiving and hospitality. One of the severest criticisms a tenant can level against his landlord is lack of generosity which is considered to be an offense against God and one's fellow men. Even the peasant strives to provide for his guests, and nomad hospitality is surrounded by elaborate rules concerning the entertainment and protection of guests.

Recently a shift from wealth to learning (as the most important avenues to social status) has been taking place. Jordanians in general are placing a great value on learning. It is often observed that Jordan lacks natural physical resources but has a rich abundance of human resources that, if they are to contribute to growth and development, then they must benefit broadly from education. In practical terms, this means that families make considerable sacrifices to educate their children, and from the government standpoint, state resources must be and are heavily invested in this sector.

The prestige attached to learning is enhanced by the fact that it correlates highly with occupation which at the end means making money and learned men often function as leaders in their communities.

Patterns of Living

The Jordanians both historically and currently can be classified as pastoral nomads (bedouins), village agriculturalists, and townsmen. These three types of occupation and residence represent distinct modes of life which from early times have differentiated the populations of the Middle East.

Nomads. Nomads are the "true" bedouins who depend mostly upon camels rather than sheep and goats for their livelihood, live in black (goat hair) tents, and do not settle in permanent houses. The Arab bedouins do not, however, fit the dictionary definition of nomads. They do not lack a fixed location and just wander from place to place. Rather, a tribe or

tribal section has fixed winter and summer camping grounds or areas. At set times of the year, the tribal group will pack up its living quarters and move to its traditional area for the relevant season.

For the pastoral nomads, social existence took meaning in terms of the value placed on independence, freedom, honor, pride in noble blood, bravery, generosity, hospitality, forgiveness, and loyalty to the kin group. Conflict between tribes was formerly the major type of competition; droughts, locusts, thirst, hunger, shame, and dishonor are still the main sources of fear and anxiety. The suppression of intertribal raiding has left the nomads with no avenue but service in the government forces for the demonstration of the military prowess so highly valued.

The recruitment of the bedouin into the armed forces, known as the Arab Legion, was very crucial for both the state and the bedouin. On one hand, the ruling Hashemites have come to rely very heavily on the army, which is staffed disproportionately with bedouin recruits who are generaly known for their loyalty; on the other hand, the army has changed and continues to change the bedouin. Its broad impact may be noted by the observation that in one major survey, more than one-third of the responding heads of bedouin households were in the military military.[24] Thus the military has extensively exposed the bedouin to modernity at various levels of literacy, health clinics, nutritional practices, new technologies, and the like. Such exposure has in turn contributed significantly to bedouin settlement and the decline of nomadic practices.

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[24] Kamel S. Abu Jaber et all., "Socio-Economic Survey of the Badia of Northeast Jordan", unpublished study, Faculty of Economic and Commerce, University of Jordan, 1976, table 5.

In sum, the unique bedouin way of life is being heavily altered by the changes introduced by the government of Jordan.

Villagers. Villagers of Jordan are largely called fallahs (tillers of the soil), which reflects the difference between their life-style and those of the bedouin and urban dwellers. The key distinction is not that they live in villages, but that their primary economic activity is farming the land, and if they practice animal husbandry, in contrast to the bedouin, they do so in a more sedentary manner.

Formerly the fallahs' economy was definitely land-based cultivating grains and husbanding animals along with trade of these products with neighbors. Today the picture is quite different. In one recent village study, the occupational breakdown was as follows: 39 percent farmers, 28 percent military, 30 percent other nonagriculture (e.g., laborers, masons, and civil servants), and 2 percent retired.[25] Phenomenally, close to half of the labor force worked outside the village, namely all those in the military and most of those in the other nonagricultural categories. This pattern, although not exact, is typical of most villages in East Jordan.

The provision of services in the villages has increased significantly since the 1960s, often with the direct participation and/or initiative of the villages. Table 1 represents a relatively comprehensive picture of what was extant in 1980-1981 and the extent of growth in the previous

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[25] Richard Antoun, Low-Key Politics: Local-Level Leadership and Change in the Middle East (Albany: State University of New York Press, 1979), p. 25.

TABLE 1

Rural Facilities and Services in Jordan

Facility/Service	1974-75	1980-81	change	% of change
Boys Secondary Schools	40	101	+61	+153
Girls Secondary Schools	24	46	+22	+ 92
Boys Preparatory Schools	347	420	+73	+ 21
Girls Preparatory Schools	283	382	+99	+ 35
Boys Elementary Schools	650	723	+73	+ 11
Girls Elementary Schools	637	704	+67	+ 11
Health Clinics	241	314	+73	+ 30
Mother Child Health Clinics	20	41	+21	+105
Improved Water Supply	328	542	+214	+ 65
Agricultural Guide Centers	34	60	+26	+ 76
Veterinary Services	8	9	+ 1	+ 13
Cooperatives	63	192	+129	+205
Post offices or Branches	480	527	+ 47	+ 10
Electrification*	49	329	+280	+571
Community Center Buildings	43	94	+ 51	+119
Child Feeding (Pre-School)	75	98	+ 32	+ 31
Kindergarten	29	75	+ 46	+159
Sewing/Knitting	39	64	+ 25	+ 64
Village Councils**	196	222	+ 26	+ 13
Municipal councils**	57	76	+ 19	+ 33

Source: Peter Gubser, Jordan: Crossroads of Middle Eastern Events (Colorado: Westview Press, Inc, 1983), p. 31.

* Rural electrification data include facilities started but not yet completed.

** The actual number for 1980-1981 is greater.

five to six years. As is evident from the data, conditions in the rural areas have improved considerably if not dramatically in even this short period.

More than 70 percent of the villages now have schools, and most of the rest are acceptably close to villages with schools; almost all villages have clinics or are near villages that do; although only 10 percent of the villages are now electrified, a major development project is scheduled to be completed by 1990 that will provide power to most villages. The greatest problem is the availability of an uncontaminated supply of potable water, which only 60 percent of the villages enjoy.[26] Although this data is relatively positive as compared to those for many developing countries, it should be pointed out that clinics are not always adequately staffed and education is not always appropriate for the students' future lives, which is not uncommon in the developing countries.

This general improvement in the rural areas is due to a series of factors. First and most salient is the general upward movement of the economy, especially since the mid-1970s (which will be the topic of the next section) and the remittances from Jordanians abroad, which partially flow to the villages. Second, villagers have become increasingly aware of potential projects that may provide needed services which they might obtain if they petition the government. Third, the government under its multi-year plans undertake to spread these services among the

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[26] Peter Gubser, Jordan: Crossroads of Middle Eastern Events (Colorado: Westview Press, Inc, 1983), p. 32.

villages. Fourth, an important contribution to this rural development has been the participation of foreign voluntary organizations in corporation with the Jordanian Ministry of Municipal, Rural, and Environmental Affairs (MIMREA). The most notable of all these efforts is the U.S. organization CARE's joint program with MIMREA, which has carried out projects in 40% of the 900 plus rural communities and small towns in the East Bank over the past ten years.

Urban Areas. The line distinguishing urban settlement patterns from rural ones is arbitrary in Jordan. The distinction is usually made on the basis of multiplicity of function and size. The towns are usually the center of economic activity such as commerce and trade, as well as light manufacturing and food processing. They are the center for government offices where certain decisions are made. Also they are central to the introduction of modernity, being the first places to have schools, health facilities, communications, and the like. For this reason, people who have mastered the attendant skills tend to live in these areas. It is been estimated that more than half of the population of Jordan are living in urban areas (close to one million people are living in the capital, Amman, and the surrounding area).

Palestinian Camps

Certainly it will be incomplete to talk about living and residential patterns in Jordan without mentioning the Palestinian camps. Although, they are considered temporary sites, nevertheless, a little more than 10 percent of Jordan's population live there. These human settlements

came into existence in Jordan in the post 1948 period and were reinforced in the post 1967 period.

Managed by the United Nation's Relief and Welfare Agency (U.N.R.W.A.), they are perhaps the most disgruntled segment of the Jordanian population. It has been argued that living in the camps creates a separate psychology and a concentration of despair and/or anger. Contributing to this state is the feeling of uncertainty among its residents, of not knowing what the future holds for them. On the one hand they like to have permanent sites, settle down, and plan their future; on the other hand, however, they know that these camps are temporary and their situation might change anytime.

Based on the physical location of the camps, we can distinguish between two kinds of camps. First, those which came to exist in the post 1948 period and those which came into existence in the post 1967 period. The first type of camps are just sections of major cities or towns such as Amman, Zarqa, and Irbid. These camps blend into the urban areas and are often indistinguishable from similar poor sections of town. Most of the second type, however, are located in rural areas, creating a certain isolation for their inhabitants, especially as they do not own the land they are on like the first group. Compared to the landless rural-based refugees, the urban camp residents obviously have distinctly enhanced opportunities for employment close to their homes.

ECONOMY

Agriculture was and to a some degree still is the primary component of Jordan's economy. It was due to the post 1948 period that the economy shifted from one dominated by agriculture to one dominated by services as both the government and the UNRWA sought to meet the needs of the refugees. One other factor is that the central government officially free of the British mandate at that time, also attempted to expand its functions and develop the country's infrastructure.

Jordan at present is enjoying an economic boom no one would have thought possible a decade ago. Its business and economic prospects have never been better. Because of its location at the center of a fast-growing Middle East market, streching from Egypt to Iraq, Jordan has become an ideal gateway for international business. Surrounding it, the countries of this market represent over 100 million people with a combined gross national product of more than $150 billion. The growth of this market has come about primarily as a result of significant shifts in the pattern of trade and payments between oil-producing and oil-consuming countries.

Jordan, for its part, is a country without oil. Despite this lack of petroleum, its neighbors seemingly ever increasing fortunes have rubbed off onto this resource poor country. Also, Jordanians have not been waiting for an oil bonanza. Living in a country without oil, they have worked harder to develop a well-rounded economy, not depending on any one product.

Jordan has managed to develop an industrial sector that is geared not only to the demands of the country's domestic market, but more importantly to exportation throughout the region. Its membership in the Arab Common Market provides Jordan with favorable bilateral trade terms that are a special advantage to industries based there. Trade restrictions with Arab countries are virtually non-existent. There are no quotes and tariffs are minimal. Furthermore, Jordan is one of the most free enterprise oriental countries in the region. Through long range planning and wise management, it has succeeded in forging a sound, well-balanced economy. A series of positive indications mark Jordan's healthy development:

A) an average real growth in its economy of approximately 10 percent annually during the past five years,

B) more than half a billion dollars a year in remittances from Jordanians working in other countries,

C) almost full employment,

D) a second government five-year economic and social development plan (1981-85), calling for an $8.4 billion volume of public and private investment, or more than triple the $2.5 billion projected (and fullfilled) under the earlier 1976-80 plan.

One of the most important factors in this rapid economic growth is the impact of many foreign capital investments. The Jordanians are very eager for these kinds of investments, especially in joint ventures. They explain that it is not just the money but also the know-how that they want.

Market access and economic stability are important, but in addition there are many other factors that suggest that foreign investors will do well in Jordan. Jordan now has become well-established as a transit point for goods shipped to and from the region, whether overland from Europe via Syria and Lebanon or by sea, via the world's principal sea lanes, through the port of Aqaba.

Good international communications are another asset and include direct-dial telex, direct telephone and live color television transmission by satellite. The postal service, too, is a plus; air mail letters and packages from anywhere to Amman normally take about five days.

The country's labor force, consisting primarily of young, educated and industrious people, is another asset. The national emphasis on education has resulted in a 70 percent literacy rate (the equivalent of many European countries). A large number of workers are bilingual, speaking English as well as Arabic. Absenteeism, a serious problem in many countries, is a rarity in Jordan. Wage rates are much lower than in the neighboring oil-producing countries, while manpower productivity rates are among the highest in the region.

Furthermore, few countries anywhere offer the incentives or government assistance to foreign investors that Jordan offers. Under a low specifically designed to encourage investment, foreign capital is regulated the same as local capital-foreigners may own up to 100 percent of enterprises- and profits may be repatriated without restrictions. Other benefits include a 100 percent exemption from taxes on profits and prop-

erty for up to nine years, and the duty-free importation of all necessary materials and plant equipment for approved projects.

As for the best areas for investment in a developing country like Jordan, it will be safe to say that almost any field is wide open, but certainly some contain greater potential than others. Of particular interest would be industries based on Jordan's own resources, such as minerals and mining (Jordan has the world's largest reserves of phosphat), agriculture, and tourism.

GENERAL SUMMARY

1. Country: The Hashemite Kingdom of Jordan was formed in 1950 after the annexation of a portion of Palestine, west of the Jordan river. The Kingdom was the successor to the Emirate of Transjordan formed by the United Kingdom in 1922.

2. Government: Under the provision of the Jordanian constitution King Hussein rules as a constitutional, but almost absolute monarch.

3. Size and Topography: Of the total territory of about 35,000 square miles, about six percent (the West Bank) is currently under Israeli occupation. The Jordan river and the Dead Sea divide the country into two regions known as the East and the West Bank.

4. Climatic Conditions: The climate is characterized by hot and arid summers and cool variable winters.

5. Population: The growth rate is 3.4% with about 3.5 million currently living in Jordan (both Banks).

6. Languages: Arabic is the official language and English is the second language. There are also a very small linguistic minorities in Jordan.

7. Religions: Islam is the official religion; Sunni Islam is the most common sect. Religious minorities include Christians of whom Greek Orthodox are the most numerous with very small numbers of other groups.

8. Health: On the average health conditions in Jordan are good. The number of general practitioners and specialists in the urban sectors are more than adequate. However, the situation is very different in the rural areas since most doctors and specialists prefer to live and have their private practices in urban areas.

9. Economy: Jordan at present is enjoying a very healthy economy.

CHAPTER II

THE STRUCTURE OF THE EDUCATIONAL SYSTEM

A BRIEF HISTORICAL DEVELOPMENT

It could be argued that the best way to examine education in Jordan is to describe the phenomenal growth of this sector. Until the end of the 19th century, education in the Islamic world (Jordan included) was almost entirely in the Islamic tradition with emphasis on classical Arabic and religious learning. Schooling was limited to the Mosque school or the Kuttab school which was founded by the Prophet Muhammad himself. The curriculum of these schools was based on memorization of the Koran with little attention paid to basic arithmetic, reading and writing skills. To those who wanted to pursue a higher education, the only fields they could pursue were classical Arabic and Islamic theology.

Christian minorities and foreign missionaries maintained their own counterparts of the Koranic schools, with a comparable emphasis on religious training. Today these traditional schools have almost disappeared, but the values placed on the facility of verbal expression and memorization have left a deep imprint on present-day education in Jordan as well as in the rest of the Arab World.

The Ottomans (who controlled the Middle East for more than four centuries) allowed foreign agencies, mostly religious or charitable, full

freedom to promote educational institutions. Secular systems of public education did not develop in Ottoman-ruled Arab countries until the western influence began to be felt at the end of the 19th century. The Ottomans maintained only a handful of elementary schools for boys in larger towns in the area, and formal schooling for girls was nonexistent. As a result, schools in Jordan did not develop until the Emirate of Jordan was established by the British in 1921. The British developed a semi-modernized system of education, both public and private, but negligible educational reforms retarded its progress. Education laws existed during the Ottoman period and remained in effect until the 1930's when legislation provided for schools in small towns and villages. At the same time several private schools were established; their role in educating the youth of the country cannot be overlooked.

Many new schools were built in Transjordan in 1921. The total in that year rose to 25 schools with 59 teachers and an annual budget of 6,000 Palestinian pounds. An intermediate secondary school was established in three towns in Transjordan (namely Salt, Irbid and Karak). Later, the two intermediate secondary schools of Salt and Irbid were upgraded to full secondary schools. By the 1930's there were 65 schools and the budget had risen to 20,000 pounds.

The story of education in Palestine was different from that of Jordan. When the British mandate ended in 1948, there were 250 elementary schools, 20 intermediate schools and 4 full secondary schools each offering, respectively, studies in commercial, industrial, agricultural and academic subjects.

With the unification of the West Bank and the East Bank of Jordan in 1950, schools were placed under the supervision and control of the Ministry of Education in Amman, and the country was divided into six educational districts: Nablus, Jerusalem and Hebron in the West Bank, and Ajloun, Balqa and Karak in the East Bank.

It could be argued that the Arabs of Palestine played a decisive role in educating their children on the one hand, and also forced the educational system in Jordan to expand very rapidly on the other. This educational expansion came to accomodate the large number of Palestinian refugees who migrated to the East and West Bank after the establishment of the state of Israel in 1948.

With the rapid increase of the number of schools and students there was an increasing need for trained teachers. The Ministry of Education established in 1952 the first teacher training institute for men in Amman, and the first one for women at Ramallah in the same year.[1] The second institute for men was established at Howarah in 1956/57, and for women at Ajlun in 1963/64, followed by a third one in Amman in 1972/73. Today there are 44 government and private colleges, and three universities pruducing an abundant supply of qualified teachers in the East Bank of Jordan alone.

The most remarkable increase in the expansion of the educational system of Jordan took place after 1968. The reason could be that hundreds of thousands Palestinians who left the West Bank settled in Jordan after

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[1] Qualified teachers from Syria, Lebanon and Palestine were recruited to teach in Transjordan.

the 1967 Arab-Israeli war. Table 2 shows the average annual increase in the number of students and teachers during a period of ten years.

Today, Jordan has 1166 schools in the primary cycle, 1057 schools in the preparatory cycle, 470 schools in the general secondary cycle and 15 schools in secondary vocational education. This plus 10 schools for the handicapped, 244 kindergarden and a large number of institutions for higher learning mentioned earlier.[2]

Table 2

Average Annual Increase (in percentage) of Students and Teachers by Level of Education and Sex, 1968-78

	STUDENTS			TEACHERS		
Level of Education	Male	Female	Male & Female	Male	Female	Male & Female
Primary	5.9	7.9	6.8	7.3	11.7	9.5
Preparatory	9.1	14.8	11.3	10.7	16.8	12.9
Secondary	9.9	18.2	12.6	11.1	20.6	13.6

Source: Fahmi Abu-Dayeh, "Rates of Return to Investment in Education in Jordan: A Case Study" (Ph.D.dissertation, University of Oregan, 1982), p. 48.

[2] Jordan, Ministry of Education, Educational Statistics, 1983/84.

ADMINISTRATION AND CONTROL

One may start by saying that a centralized system of administration and control prevails in Jordan as well as in most Arab States. Under this system the power of policy making, curriculum development, textbook production, examinations, teacher certification, recruitment, promotion and termination of staff, and so on, is given to the central government. The central government exercises this power primarily through a national Ministry of Education (MOE). Attached to the ministry is a council or advisory board that assists the minister in carrying out the policies of the government.

The MOE in Jordan exercises its power through the system of financing as well as the inspection system. The MOE prepares the educational budget for the country as a whole (except where educational functions are carried out by other relevant ministries as in programs of vocational training, out of school youth, adult education, army and religious schools, and so on). Once the budget is approved the MOE makes the final determination as to who gets what, when and how. Also, the system of inspectors[3] is founded on the idea that the MOE should be able to reach even the remotest villages supposedly to ensure that educational programs are properly implemented. It should be noted here that the supervisors or inspectors of the MOE have the right to inspect private as well as public schools. Articles 59-77 of the law of education of

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[3] The main function of the inspector of education is to evaluate the performance of the teacher. The inspectors usually comes to the classroom unannounced and his evaluation can result in either recommending or denying a promotion to the teacher.

1964 state that:

1) No private educational institution can be established before a license is acquired from the Ministry of Education.

2) All private schools must fulfill the aims and objectives of education as laid down by the Ministry of Education.

3) All private schools must use the textbooks prescribed by the Ministry of Education in the elementary and preparatory schools.

4) Private schools may teach more than one foreign language, usually English and French.

Figure 1 shows the administrative set up in Jordan. Under this system authority is exercised from the top down; with responsibility, however, exercised from the bottom up. All this is done through a cumbersome administrative machinery. The Minister is clearly in complete control of education in the whole country. He is also assisted by the directors of some fifteen educational directorates distributed all over the country.

Figure (1)

MINISTRY OF EDUCATION
ADMINISTRATIVE STRUCTURE

Planning Coordination Committee		Minister of Education	Board of Education	
		General Secretary	Assistant Secretary	
Director of Technology Educ.	Director of Cultural Relation	Director of Financial Services	Director of Personnel Affairs	Director of Exam.& Measur.
Teaching Aids Sec.	Scholarships Sec.	Accoun. Sec.	Adminis.& Person.Sec.	General Exam.Sec.
Educational T.V.Sec.	Student Abroad Sec.	Supplies Sec.	Cader Sec.	Teaching &Meas.Sec.
Educational Casting Sec.	Cultural Relation.Sec	Financial Control.Sec.	Salaries Sec.	Community Colleges Sec.
Maintenance Sec.	Arab.Inter. Organ.Sec.	Transport Sec.	Disciplinary Procedures Sec.	School Testing Sec.
Studies Sec.	General Relation Sec.		Records,Doc. &Files Sec.	Authentification Of Cert.Sec.
Laboratories Sec.	Educational Information Sec.		Allowance &Trans.Sec	Equivalence Of Cert.Sec.
Chief Clerk	Compulsory Military Serv.Sec.		Military Serv.Termin.Sec.	Education License Sec.
	Chief Clerk		Secondment &Leave Sec.	Accountancy Sec.
			Chief Clerk	Chief Clerk

Figure (1) Continued

MINISTRY OF EDUCATION
ADMINISTRATIVE STRUCTURE

Planning Coordination Committee | Minister of Education | Board of Education

General Secretary | Assistant Secretary

Director of Student Affairs	Director of Buildings	Director of Projects	Director of Inservice Training	Director of Educational Activities
Guidance Section	Design & Implementation	Engin. Sec.	Programs Mangement Sec.	Physical Education Sec.
School Health Sec.	School Building Service	Equipment Sec.	Programs Preparation Sec.	Scouting Sec.
Nutrition Sec.	Building & Housing Sec.	Accounting Sec.	Registration &Exam. Sec.	Social Activ.Sec.
		School & Expert Sec.	Sec. of Servicees	Social Activ.Sec.
		Chief Clerk	Chief Clerk	Voluntary Work & Sch.Trips
				Nutrition & Sch. Health Sec.
				Chief Clerk

Figure (1) Continued

MINISTRY OF EDUCATION
ADMINISTRATIVE STRUCTURE

Planning Coordination Committee | Minister of Education | Board of Education

General Secretary | Assistant Secretary

Director of Community Colleges	Director of Education	Director of Curriculum	Director of Computer Center	Director of Educational Plann.Res.
Public Community Colleges	Public Education Sec.	Curriculum Supervision Sec.	Analysis& Programming Sec.	Education Planning Sec.
Private Community Colleges	Private Education Sec.	Sch.Textbooks &Printing	Data Entry &Up Dating Sec.	Statistics Sec.
Training Programs Sec.	Industrial Education Sec.	Children Literature Sec.	Operating Sec.	Education Research Sec.
Registration Sec.	Commercial &Postal Ed.Sec.	Israeli Studies.Sec.	Chief Clerk	Budget Sec.
Chief Clerk	Agricultural Ed. Sec.	Library Sec.		Educational Docum. Sec.
	Female Vocat. Ed. Sec.	Acc&Supply Sec.		Chief Clerk
	Continuing Educ. Sec.	Chief Clerk		
	Liter.&Adult Ed.Sec.			
	Follow Up Of Vocat.Ed.Sec.			
	Counciling &Guid.Sec. Chief Clerk			

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/1983. p. 7.

Although there are no known studies in Jordan, a recent study conducted on the locus of curriculum decision-making in a similar neighboring country (Qatar) confirms the observations made previously: that important educational matters are always handled centrally.[4]

The study sample, which included high-level administrators, school administrators and teachers, showed that 88 percent of the participants agreed that curriculum development takes place in the MOE. When asked to identify from a list of potential participants the key ones in the curriculum decision-making process, 81.5 percent of the participants named the Ministry chiefs. This was followed by 72.3 and 69 percent of the respondents identifying "Trained curriculum Researchers and Developers," and "Subject Matter Inspectors," respectively. All of these functionaries are members of the MOE staff. Not surprisingly, however, only 9.2, 5.4, and 3.8 percent of the respondents named the "Director of the School district, the Students, and the Parents" as principal decision makers.

One of the important findings was that higher-level administrators expressed a willingness to get a wider basis of involvement in curriculum decision making, but they "seemed unwilling to delegate any significant authority to teachers and school administrators." On the other hand, teachers and local administrators would like to have more control "over development of staff and other routine school matters, including

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[4] Abdel Rahman H. Al-Ibrahim, "Towards a Conceptual Model for Curriculum Development: The Case of Qatar," Vol. 1 (pp. 1-288); Vol II (pp. 289-456) (Ph.D. dissertation, State University of New York at Buffalo, 1980).

some budget decisions." Under the present system, they find it necessary to seek authorizations for every small detail from the Ministry, something they consider to be both "inefficient and pointless." On whether or not they approved decentralization, higher-level administrators (40 in the sample) responded as follows: 11 said yes; 21 said no; and 8 had no response.

The study also found that the most significant problem is that of communication among the various bureaus and agencies of government. Inside the MOE "people are often unaware of what is going on outside their own units....the picture that emerges is one of isolated units and isolated people."[5]

The need to decentralize education in the Arab states (Jordan is certainly no exception) was expressed by Matthews and Akrawi in 1949. After concluding that "education in the Arab states is almost completely centralized," they indicated that decentralization was greatly needed.[6] They thought that decentralization was necessitated by the fact that it would provide incentives for parents to be involved in the education of their children. Local responsibility "could establish a bond between the school and the community, so the school can better influence the life of the community and the community can provide a stimulus for the activity of the school." Some 36 years later the findings and recommendations of Matthews and Akrawi still hold true.

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[5] Ibid., p. 191.

[6] Roderic D. Matthews and Matta Akrawi, Education in Arab countries of the Near East (Washington, D.C., American Council on Education, 1949), p. 542.

The realizing of the seriousness of this problem and the rapid educational expansion forced Jordan to take some kind of decentralization measures. It has been argued that when the educational system becomes larger and the educational burden becomes heavier, the move towards decentralization will gain greater momentum. As could be seen from figure 1, the central office of the MOE is divided into some fifteen educational districts. Each district has a director who acts as the educational and the administrative head of the district and can make some educational decisions in his district without consulting the MOE.

In view of what has been said, it could be argued that some decentralization efforts have been accomplished to a limited extent. While teachers can be moved from one school to the other by the local district, curriculum syllabi and textbooks are developed and revised only in the central office of the Ministry of Education. It is possible that the director might send teachers' comments and suggestions about the subject syllabi and textbooks to the Ministry of Education, but the extent to which these comments are taken into considerations is a matter to be decided by the MOE only.

In summary, one might argue that problems in the area of educational administration do exist in Jordan and elsewhere in the Arab World. These problems were recognized by Abu-Dhabi conference of Arab Ministers of Education (Jordan is a member) in November 1977.[7]

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[7] Conference of Ministers of Education and Ministers Responsible for Economic Planning in the Arab States, New Prospects in Education for Development in the Arab Countries, Abu-Dhabi, November 7-16, 1977 (Paris: UNESCO, MINEDARAB, 1977), pp. 60-61.

Among the many important recommendations, the Conference emphasized the need to modernize educational administration. This included the ability to analyze what they termed as "objective reality," which included the adoption of training programs designed for administrators, the refinement of administrative roles and responsibilities, the revision of laws and bases of financing, a reconsideration as to who should have decision-making powers, and the introduction of a system for evaluating the administrative process.

The Conference concluded that in the final analysis, "decentralization means the delegation of authority, that is, of the right to make decisions, from the central authority down to the base....the ability of local communities to find internal sources of finance....the participation of these communities members in the actual management of their education." Whether these recommendations have been taken into consideration is a matter left to the member States.[8]

Educational Responsibilities of Other Government Agencies

Although the MOE has over-all control or policy delineating powers in education as a whole, other governmental entities share responsibilities for the nature and content of education. Thus, while the Ministry has virtually exclusive jurisdiction over the free compulsory elementary school system, it shares some responsibility for secondary education, particularly agricultural and labor, respectively.

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[8] Ibid., p. 61.

Besides the above-mentioned Ministries, the army schools play a very important role in education in Jordan. The high literacy rate among the Nomads in Jordan could be attributed to the fact that they learn in the army schools while serving in the armed forces. A fine example is Mu'ta University in which the students undergo military training after study hours. The philosophy of this military university is to educate a corps of prospective civilian and military leaders who will understand and appreciate the importance of their interdependence and responsibilities towards society.

There is also the Al-Awgaf department (Ministry of Religion) which plays an important role in operating secondary schools and institutions for Islamic studies.

The Ministry of Social Affairs has jurisdiction over the planning and supervision of school social services, special clubs, and some vocational-training centers. It also maintains a number of institutions for delinquent youths and for physically and mentally handicapped children. Lastly, the Ministry of Public Works supervises the construction and expansion of school buildings all over the country.

ORGANIZATION AND STRUCTURE OF EDUCATION

Since the second World War, the educational system in Jordan and in various other Arab countries has been undergoing considerable change. Jordan, under colonial rule, had to follow the pattern of the educational system of the colonizer. Under the British mandate, Jordan had the typical school structure and organization found in Britain at that

time. Schools under the influence of the colonizer were characterized by rigid curricula and very stiff examinations from one stage of education to the next. It could be argued that the structure and organization of the schools at that time discouraged a large number of people from attending those schools. In other words, schools were designed and restricted to the few instead of the many; schools were catering to the needs of the rich and/or the elite.

For a long time the educational ladder in Jordan followed the 7-4 years plan.[9] Under this plan (system) students underwent seven years of elementary education, followed by four years of secondary education. High schools were not available at that time. Upon the completion of the elementary cycle, students would sit in a public examination prepared by the Ministry of Education. Those who passed the examination would be permitted to advance to the secondary cycle and those who did not would be terminated. As a result a large number of students were forced to leave school at a very early age and look for jobs which were not available.

With the democratization of education and the concerted effort of the government of Jordan to rid themselves of foreign educational prescriptions, a modern structure of education has emerged. The structure is basically a 6-3-3 pattern of school organization. It is basically the same system followed in the United States and its beginning dates back to 1957/58 and the cultural agreements adopted by Egypt, Syria, Iraq,

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[9] Matta Akrawi and A. A. El-koussy, "Recent trends in Arab Education," International Review Of Education 17, no. 2 (1971), p. 182.

and Jordan. With one or two exceptions, it is safe to say that this pattern of school organization has been adopted by all Arab countries.

The educational ladder in Jordan is similar to the one in the United States. Children normally start the six years of elementary education at the age of seven. The elementary cycle is followed by three years of preparatory cycle (junior high). At the end of these nine years of free compulsory education, all students sit for the Public Preparatory Education Examination. According to the Education Act of 1964, those who do not pass the examination are not entitled to any further education. Those who do pass, however, are entitled to pursue their education in the three-year secondary education schools (senior high). Depending on the number of vacancies available in the 10th grade (the first secondary year) and also on the student's academic achievement (as measured by grades), students may be admitted to either secondary general schools or secondary vocational schools.

The secondary general schools offer two options or streams: literary and scientific. Both of these streams start at the beginning of the second year in the secondary cycle (11th grade) and the only criteria for this division is the student's academic achievement in the subject matter. Usually those students with high achievement records in science and mathematics are allowed to take the more prestigious scientific majors, otherwise, students will major in the literary stream. It should be noted that girls are usually more inclined to take the literary major; with boys, the division into the two majors tends to be almost equal.

Those who fail to be admitted to the secondary general schools (lower achievers) are usually left with one option, namely the secondary vocational schools. This type of education offers eight options: commercial, postal, industrial, agricultural, womens education, nursing, hotel management, and different vocational centers.

Students in the final year of secondary school sit for the Public Secondary Education Examination (Tawjihi) held by the Ministry of Education. Those who pass the examination generally pursue their studies in institutes of higher learning, either in Jordan or abroad. Those who do not pass are absorbed in the labor market or may try to pass the examination in the following year given the fact that they have to do it on their own. Usually they attend private schools[10] because they are not permitted to study in public schools again.

It has been estimated that for every 100 students who enter the first grade, 25 of them reach the third secondary year (12th grade), that is, 25% of the students of the first grade of 1973/74 for example, are expected to finish their secondary education and get high school certificates in 1985/86. On the average, 60% of the students who sit for the

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[10] Contrary to the common belief and/or the findings of some studies that private schools provide a better education than the public ones, the situation in Jordan is quite different. Although there are some private schools which are known as very prestigious schools and believed (this is just a common belief and it is not supported by any research) to be better schools than the public ones on the average, public schools are far better schools than the private ones. This is because of the kind of students who attend both schools: the population in public schools are a mixed population and students who attend private schools are usually those who did not pass the Public Examination. Since those people cannot study in public schools after failing the examination, they are forced to attend private schools. These schools are mostly designed for profit-making and do not provide for quality education.

Public secondary examination pass the test and graduate with a high school diploma. This percent of success has been steady for the last decade.

When discussing the issue of educational structure, the question of access will be of great importance. The main issue is whether or not the educational structure as it is now in Jordan is flexible enough to accommodate all children, including those in poor neighborhoods as well as those in rural areas. One way to examine the issue of schools accessibility is to focus on students flow and educational opportunities which is the topic of the next section.

STUDENTS FLOW AND EDUCATIONAL OPPORTUNITIES

According to the educational statistics of 1971/72, 95% of children in the (6-11) age group were attending elementary schools, 70% in the (12-14) age group were attending preparatory schools, and 35% in the (15-18) age group were attending secondary schools. At the higher level of education the enrollment ratio for the (18-23) age group was estimated at 18%.[11]

Realizing the importance value of education the Ministry of Education had laid down the following main objectives for the 1980's:

1. To achieve by 1980, the enrolling in elementary schools of all children in the (6-11) age group.

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[11] Najati Al-Bukhari, Education in Jordan, (Ministry of Culture and Information, Amman), p. 6.

2. To achieve more educational opportunities to enable, by 1980, an 80% participation rate for children in the (12-14) age group.

3. To diversify education at the secondary level and to increase the number of students enrolled in vocational schools.

4. To encourage girls to remain more years in the elementary and preparatory schools, since the participation rate for girls is less than that of boys.[12]

From looking at table 3, it could be seen that on the average, these objectives have been fulfilled in the school year of 1982/83. The table shows 90.8%, 88.8%, 67.9%, and 21.1% enrollment ratios for the elementary, preparatory, secondary, and higher education respectively.

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[12] Ibid., p. 6.

Table 3

Educational Enrollment Ratio By Cycle, Sex, and Age Groups 1982/83

Cycle & Age	Elementary	Preparatory	Secondary	Higher Ed.
	6-11	12-14	15-17	18-23
Sex				
Total Students	430170	180583	119010	49403
Total Population	474016	203254	175217	234092
Net Enrollment Ratio	90.8%	88.8%	67.9%	21.1%
Male Students	224482	96732	62636	28871
Male Population	243894	105874	95573	117930
Net Enrollment Ratio	92.0%	91.4%	65.5%	24.5%
Female Students	205688	83851	56374	20532
Female Population	230122	97380	79644	116162
Net Enrollment Ratio	89.4%	86.1%	70.8%	17.7%

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/83. p. 11.

It should be noted that the first objective has not been accomplished. It falls far below the 100% goal set by the Ministry of Education. From the table it can be seen that the enrollment ratio in the elementary schools did not exceed the 90% mark. The question is what happened to the remaining 10%? This is a very large number especially in Jordan. The most reasonable answer could be that they are attending schools outside Jordan and the statistics reported by the Ministry of Education failed to report them. My view is based on the fact that it is most likely that the population census taken by the government was conducted during the summer. It is usually taken by individuals from the Ministry of Housing who go from house to house since they cannot rely on postal services. Since this is the case, it is expected that the population of this age group will increase since a large number of Jordanians who work outside Jordan usually spend their summer vacations with their families in Jordan.

Now, when the Ministry of Education conducts its count of students enrollment, it is more likely that they do so during the school year (summer not included). If this is the case then they could only get the number of children who are studying in Jordan and not the ones who already left the country with their parents. In other words, the enrollment ratio in elementary schools is expected to be much higher than what the Ministry of Education has been reporting.

Other possible explanations could be that some children who fall in the age category of (6-11) postpone their enrollment for one reason or the other. Also, I suspect that population census in Jordan is not very

accurate especially when it comes to age. It is possible that many children who fall under such age category are in fact younger. For example, if a child is five years and ten months old, his parents are most likely to register him as six years old. In this case, although he belongs to the (6-11) age group, he is not permitted to enroll in any school.

Preparatory, and secondary schools ratios have far exceeded what the Ministry of Education has set to accomplish. Table 3 shows a ratio of 88.8% and 67.9% for the preparatory and secondary schools respectively. Comparing these enrollment rates to the ones prevailing in the world, it could be safe to say that Jordan compares favorably with the developed countries (Jordan is considered as an under-developed country). As compared to the Arab countries, these reported enrollment rates are among the highest in the area.

The ratio for higher education (post secondary education) is calculated at 21.1% among the (18-23) age group. This ratio represents the number of students who are studying at Jordanian Colleges and Universities only. Adding to this number the estimated 57,936[13] Jordanian students studying abroad, the ratio will increase to an all-time high of 48.8%.

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[13] This number is the grand total of two groups. The first group, 17,357 students, has been reported by the Ministry of foreign affair offices abroad. It is believed to be accurate and its ratio is calculated at 7.4%. The second group, 40,579 students, has been reported by the Ministry of Education. This number is only an estimate and it is believed to be not accurate, however, it is ratio is calculated at 17.3%.

As for the fourth objective, namely encouraging girls to stay more years at the elementary and preparatory schools, the table shows that this objective has been fulfilled. The male ratio is slightly higher than the female ratio in both elementary and preparatory schools, while the female reported ratio in secondary schools is higher than that of the male. The reason could be that once females stay beyond compulsory education they are most likely to continue their education. On the other hand the dropout rates for males are expected to be higher than females since a large number enter the labor market at an early age. A second explanation could be that a large number of males usually join the Army (two years compulsory service) after failing the Public Examinations, meanwhile, females who cannot join are most likely to take the exam again and stay in school. At least three major reasons could be cited as influencing this high rate of enrollment:

1. The increasing efforts of the government of Jordan to offer equal educational opportunities to the greatest number of people.

2. The co-operation of the people and their faith in the value of education as the best way to development and self-fullfilment.

3. The supply and demand issue has played a very important role in increasing the number of participants in education in the Arab World in general and in Jordan in particular. Because of the increasing demand, the educational system expanded to absorb the increasing number of people who realized that investing in education is one of their best alternatives. For a long time the people of Jordan have correlated education with occupation, especially after the increasing demand of the rich Arab countries for educated people. It has been demonstrated by Dr. Abu-Da-

yeh that additional education is associated with additional life-time earnings in Jordan (see figure 2). It can be seen from figure 2 that, on the average, the lowest income is earned by those who have 0-5 years of schooling. On the other hand, the highest income is earned by those who have completed 16 or more years of schooling. In other words, the higher the person's education the higher his income[14]

Financing Of Education

Education in Jordan is free and compulsory in the elementary and preparatory schools, and it is also free in secondary education both general and vocational. Education is also free in some teacher training institutes. Textbooks are distributed to students free of charge in the elementary and preparatory schools, and at nominal prices (to cover the cost of printing) in all secondary schools. Nevertheless, students are usually asked to contribute a nominal sum not exceeding one JD to the school funds, however, students from poor families are exempt from this contributions, as a matter of fact, the school fund is sometimes used to help poor students.

The Ministry of Education usually looks towards the central government budget as the only dependable and recurring source of financial support. The second source of revenue, although it is very minimal, is the local source represented as contributions and donations by local municipal councils and private individuals.

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[14] Fahmi Abu-Dayeh, "Rates of Return to Investment in Education in Jordan: Case Study" (Ph.D. Dissertation, University of Oregon, 1982), p. 150.

Figure 2

Age-Income Profiles by Level of Education and Age
(A)

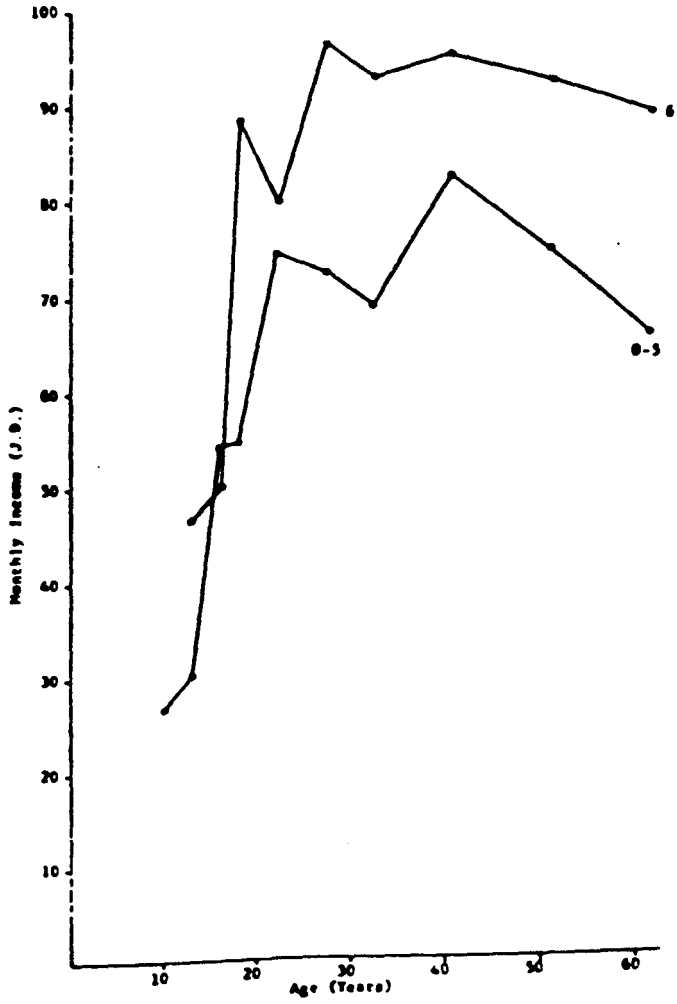


Figure 2 (continued)
(B)

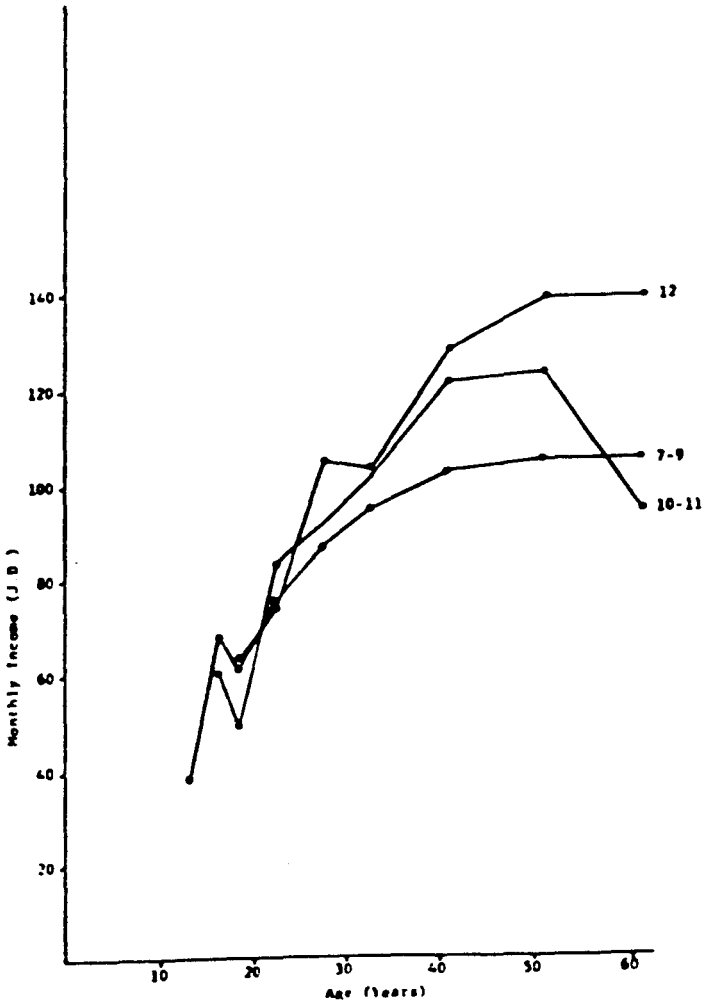
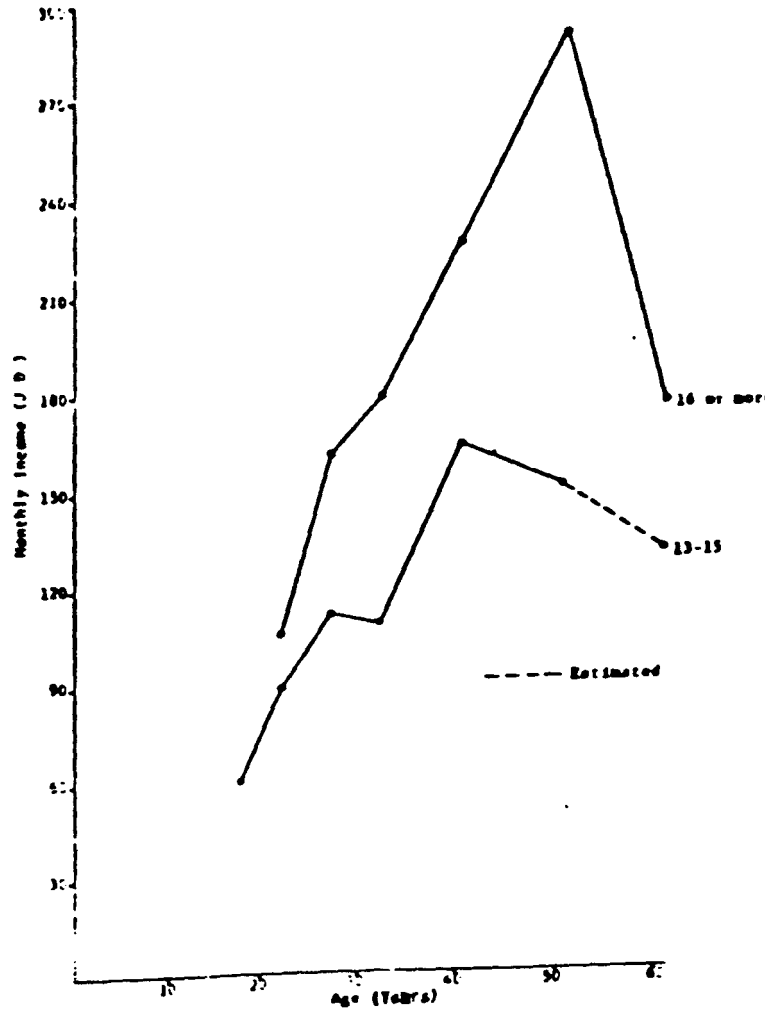


Figure 2 (continued)
(C)



Source: Fahmi Abu-Dayeh, "Rates of Return to Investment in Education in Jordan: A Case Study," (Ph.D. Dissertation, University of Oregon, 1982), pp. 113-115.

A study of the Ministry of Education's annual budget for ten years (1974- 1983) demonstrates that the MOE has averaged 8% of the entire national budget. However, in absolute terms, there has been a steady increase in the amount of funds allocated to public education (see table 4). In 1982/83 the public budget of education was JD 63,950,000. It is estimated that 72% of the total budget goes to elementary, preparatory, and secondary education with 84% of this total and 65.7% of the grand total going to the salaries of teachers and other personnel.[15] It should be argued here that the Ministry of Education is not the only source of financial support for education in Jordan. Although statistics are not available in terms of dollars and cents, table 5 shows that there are a total of 2895 schools in Jordan and they are distributed among the following authorities: the Ministry of Education which controls 2238 schools, private schools occupy a second position with 423 schools, UNRWA controls 212 schools, Ministry of Defense has 12 schools, and 10 schools belong to other government authorities.

Putting all these facts together and taking enrollment ratios as a criterion, it could be argued that Jordan is among the first countries in terms of the provision of educational opportunities for children. Jordan is offering educational opportunities for about one-third of its population with a very high rate of enrollment as compared to other countries around the world.

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[15] Jordan,Ministry of Education, The Statistical Educational Yearbook, 1982/83. p. 13.

Table 4

Comparative Statistics of the Ministry of Education Budget and Its Percentage to the State Budget for the years 1974-1983

Fiscal Year	State Budget	Ministry of Ed. Budget	Percentage to State Budget
1974	165,667,000	11,942,000	7.2
1975	218,250,000	14,873,80	6.8
1976	263,000,000	18,610,500	7.1
1977	332,600,000	22,315,000	6.7
1978	317,813,000	26,357,000	7.1
1979	513,683,000	35,766,000	7.0
1980	529,233,000	39,668,000	7.5
1981	638,250,000	50,781,000	8.0
1982	765,600,000	61,563,000	8.0
1983	775,370,000	63,950,000	8.2

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/83. p. 143.

Table 5

Number of Schools, Students, and Controlling Authority, 1982/83

Controlling Authority	Schools				Students		
	Total	Male	Female	Co.Ed.	Total	Male	Female
Grand total	2895	1012	814	1069	820113	435170	384943
Ministry of Education	2238	874	707	657	594961	310273	284688
Ministry of Defense	12	7	2	3	3814	2828	986
Other Gov. Authorities	10	-	-	10	3928	3551	377
U.N.R.W.A	212	104	89	19	134147	69746	64401
Private Schools	423	27	16	380	83263	48772	34491

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/83. p. 23.

Although the people of Jordan are investing heavily on education, Jordan as a country itself does not spend a large sum of money on education (as compared to some Arab countries). Since Jordan is a poor country, a large amount of its budget comes from other countries such as the U.S.A. or the oil-rich Arab countries. Obviously, the capital-rich countries invest more money per pupil than the capital-poor countries, but the question could be, is education better in the countries that invest more money? In the absence of up-to-date research from all countries, I cannot give a definitive response. My best guess will be that perhaps it is better.

What I am trying to develop with this data is the question of efficiency of any educational system. Are the rich countries' educational systems run well? Or, maybe, there is more wastage and not neccessary better education than found in poor countries. Is a student graduating from the Saudi Arabia schools, for example, better qualified than one graduating from the Jordanian schools given the fact that Saudi Arabia spends a lot more money on education than does Jordan? In the absence of detailed analysis and studies of both systems, the answer again would be "we do not know."

The point I am trying to make is that substantial financial support for education without accompanying changes in the human power of the schools, the quality of personnel, and the nature of the curriculum will not result in overall educational improvement. It appears that given a financial base, even the poorest countries can have quality education available to all who wish to obtain it provided a management plan is

adopted and adhered to, a plan that is appropriate to the conditions prevailing in that country. The case of education in Jordan is one to be taken into consideration.

SUMMARY

The present system of education in Jordan had its beginning following the merger of the East (Transjordan) and West (Palestine) Banks in 1950. The Ministry of Education was set to unify the two systems of education, one in Palestine and the other in Transjordan.

Education in Jordan is free, compulsory (elementary and preparatory), and the duty of the state. The educational ladder is similar to the one in the United States. It consists of 6-years elementary schools, 3-years of preparatory schools, and a nationwide examination is given at the end of this stage. Those who pass usually continue their education either in secondary schools or in the various colleges such as industrial, agricultural, or commercial, depending on their grades in the Public Examination. The final stage is a 3-year secondary school which also ends with a national secondary exam. Students who pass the exam receive their high-school diplomas which entitles them to pursue a higher education in the Universities and Colleges in Jordan and abroad.

The Ministry of Education has an overall control of education. It exercises its power through the system of financing as well as inspecting. Because of this the educational system in Jordan is considered to be a centralized system of education. It has also been argued that some decentralization efforts have been accomplished to a limited extent. In

other words, the educational system in Jordan is neither completely centralized nor completely decentralized. It has a mixed feature of centralization and decentralization.

Lastly, students flow and educational opportunities have been discussed. It has been argued that the enrollment ratios in Jordan are among the highest in the area. It also compares very favorably with ratios in most of the countries around the world.

CHAPTER III

THE EDUCATIONAL EXPANSION

The Hashemite Kingdom of Jordan is one of the world's smallest nations. Its human and natural resources are very limited. Yet it has one of the best educational accomplishments in the Middle East area. At the beginning there were only a few schools in the country and only the very fortunate ones were able to get an education in these schools. Now it has been estimated that one-third of the country's population are students.

Since its independence forty years ago, the country never passed up an opportunity to develop and expand its educational system. At the beginning the task was to provide some education to a largely illiterate nation, but as I will show later in this study, education has actually become the nation's way of survival. In the words of a former Jordanian Cabinet Minister, "Jordan's main industry is education and the country's main export is human talent."[1]

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[1] Paul Huygelen, Jordan (Jordan Information Bureau Press, Summer/Fall 1981), p. 9.

[2] Thomas F. Green, Predicting the Behavior of the Educational System (Syracuse, New York, Syracuse University Press, 1980).

Building on Green's[2] theory on the behavior of the educational system, the expansion of the educational system in Jordan will be examined, documented, and analyzed. The question at hand is not whether the educational system in Jordan expanded or not; given time and normal conditions it is only natural for any system to expand and develop. The important questions are: How did the system expand? Why did the system expand? Lastly and most importantly what are the major consequences of this expansion, if any?

How The System Expanded

The How question can be answered by simply describing the modes of growth of the educational system. According to Green, "The system is susceptible to expansion in at least eight different ways." These are as follows:

1. The system may expand in response to increases in the school age population either by increasing the number of units in the system, or by increasing the number of students in units of the system, or both.

2. The system may expand by increasing rates of attendance and survival. Growth in attainment.

3. The system may expand by adding levels either at the top or at the bottom. Vertical expansion.

4. The system may expand by assuming responsibility for educational and social functions that are either new, that have been ignored, or that have been carried out by other institutions. Horizental expansion.

5. The system may expand either by differentiation of programs or institutions or both. Differentiation.

6. The system may expand by intensification, that is, by attempting to do more in the same time or the same in less time. Growth in efficiency.

7. The system may expand by extending the school year or the school day.

8. The system may expand by increasing the number of persons needed to staff it independently of the number of students and number of its units, the magnitude of the school-age population, rates of attendance, survival.[3]

For the purpose of this study, I will go one step beyond just listing the modes of growth. The educational system in Jordan will be divided into levels and examined accordingly. These levels are: Pre-Secondary, Secondary, and Post-Secondary/Higher education.

Pre-Secondary Education

Pre-secondary education in Jordan can be divided into at least three levels: kindergarten or pre-school education, elementary, and preparatory (junior high) education. For the purpose of this analysis the last two levels of education will be grouped into one level called "compulsory education".

Kindergarten or Pre-School Education

Although this type of education had its beginnings in Jordan as early as 1933, it is still not known to the majority of people throughout the entire country. Although it is regarded as essential for children in most developed countries, it is still considered a luxury by the vast majority of people in Jordan.

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[3] Ibid., p. 10.

According to the Ministry of Education statistics for the school-year 1982/83, the total population of children between the age of 3-5 years (pre-school age) was 257,208. The number of children who attended kindergarten schools in the same year was only 22,930. The enrollment ratio was calculated at 8.9 percent which is the lowest ratio of enrollment among all levels of education.

This low enrollment ratio might be attributed to at least two main factors. First, pre-school education is carried out by private educational establishments which is mainly found in big metropolitan areas. Table 6 shows that out of 239 pre-schools in Jordan, 237 of them belong to the private sector. Only two schools belong to the public sector, one is controlled by the Ministry of Education and the other is controlled by the Ministry of Defense. Table 6 also shows that only 57 pre-schools are found in the rural areas while the rest are found in urban areas. It follows that services of these schools are limited to the people residing in these areas. Secondly, private schools charge fees for their services and only a few people can afford to pay such fees. These geographical and economic factors are main reasons for the low enrollment

Despite the fact that pre-school education is still the privilege of the few in Jordan, the demand for this type of education has rapidly increased over the years. Table 7 shows the number of kindergartens, children, and teachers for the years 1953-1983. The statistics in table 7 depicts the slow but steady increase in this type of education over the years. For example, the table indicates that 9,740 children attended

Table 6

Summary Data of Schools, Teachers, and Children By Sex and Controlling Authority, 1982/1983

Controlling Authority	Sex	Schools	Teachers	Number of Children	Urban Schools	Rural Schools
Grand Total	Total	239	854	22930	182	57
	Male	1	4	12802	1	_
	Female	2	850	10128	2	_
	Co-Ed	236	_	_	179	57
Ministry of Education	Total	1	4	48	1	_
	Male	_	2	24	_	_
	Female	_	2	24	_	_
	Co-Ed	1	_	_	1	_
Ministry of Defence	Total	1	11	292	1	_
	Male	_	_	160	_	_
	Female	_	11	123	_	_
	Co-Ed	1	_	_	1	_
Private Schools	Total	237	839	22590	180	57
	Male	1	2	12618	1	_
	Female	2	837	9972	2	_
	Co-Ed	234	_	_	177	57

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/83. p. 65, 67.

twenty-two schools in 1953/54 and 16,359 children attended forty-seven schools in 1966/67, an increase of 68% in the number of children and 113.6% in the number of schools. In 1982/83 the number of schools and students has reached 239 and 22,930, respectively for this type of education.

However, this steady increase was disrupted in 1967. As a result of the Arab-Israeli war in that year, the West Bank of Joradan fell under Israeli occupation and subsequently Jordan lost 34 pre-school establishments and the number of children decreased from 16,359 to 11,471, a decrease of 29% in one year.

The largest increase in pre-school education took place in Jordan between 1974/75 and the present. This period marked many social changes in the country. Among these were the ever increasing number of women who were and still are seeking employment outside the homes. The number of women joining the workforce has increased dramatically over the past few years. In 1974 women were estimated at a mere 4 percent of the workforce in Jordan. This figure rose to 14 percent by 1981, to 17 percent in 1982 and is still rising.

Together with the decline of the extended family system which dominated the area for so many years, families were forced to send their young children to kindergartens who otherwise might be taken care of by their mothers and/or members of their extended family.

Table 7

Comparative Statistics of the Numbers of Kindergartens, Children, and Teachers for the School Years 1953/54 - 1982/83

School Years	Number of Schools	Number of Students			Number of Teachers		
		Male	Female	Total	Male	Female	Total
1953/54	22	5001	4739	9740	-	-	-
1954/55	20	4332	3844	8176	-	-	-
1955/56	20	5238	4137	9411	-	-	-
1956/57	14	5285	4276	9561	-	-	-
1957/58	15	5180	4300	9480	19	69	86
1958/59	25	5430	4622	10052	69	219	288
1959/60	28	6515	5079	11595	77	285	362
1960/61	17	6528	5409	11937	55	268	323
1961/62	24	7040	5868	12908	36	294	330
1962/63	27	7371	5829	13200	27	324	351
1963/64	29	7726	6107	13833	16	269	258
1964/65	26	7477	6551	14028	10	302	312
1965/66	31	8233	6707	14940	6	352	358
1966/67	47	9055	7304	16359	16	357	373
1967/68*	13	6435	5136	11571	11	218	229
1968/69	27	7501	6063	13564	10	253	263
1969/70	30	5395	3779	9174	2	202	204

Table 7 Continues

Comparative Statistics of the Numbers of Kindergartens, Children, and Teachers for the School Years 1953/54 - 1982/83

School Years	Number Schools	Number of Students			Number of Teachers		
		Male	Female	Total	Male	Female	Total
1970/71	34	6000	4674	10674	14	284	298
1971/72	35	7639	5408	13047	4	320	324
1972/73	39	8034	5846	13880	2	361	363
1973/74	51	8189	6072	14261	2	372	374
1974/75	158	8738	6369	15107	3	439	442
1975/76	159	8609	6343	14952	2	451	453
1976/77	147	7999	6300	14299	1	434	435
1977/78	153	8114	6931	14045	1	439	440
1978/79	167	8591	6650	15241	2	518	520
1979/80	189	9719	7441	17160	2	637	639
1980/81	207	11226	8372	19598	6	731	737
1981/82	221	11852	9346	21198	3	744	747
1982/83	239	12802	10128	22930	4	850	854

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1967/68, Amman: The National Press, 1968, p. 138. The Statistical Educational Yearbook, 1974/75, Amman: The Army Press, 1975, p. 84. The Statistical Educational Yearbook, 1982/83, p. 69-83.
*Data beyond 1967/68 is for the East Bank only.

Compulsory Education

The idea of compulsory education is not new in Jordan. It started with the creation of the Ministry of Education for the first time in 1939. The idea then was to provide students with five years of education in the urban areas and only four years in the rural ones. In 1944, the number of school years was upgraded to seven years in all areas for all students. Also in that year students were asked to take a state examination to obtain an elementary certificate.

In 1955, an educational law was introduced to reduce the elementary stage to six years and added the seventh year to the secondary stage, thus reducing the compulsory stage to six years of elementary education. The number of school years of compulsory education kept fluctuating in the country until 1964. In that year, compulsory education was adjusted to include six years of elementary education and three years of preparatory education. Also students who successfully complete the compulsory stage are required to pass a state examination before they are allowed to continue to the secondary stage.

Between the 6-7 year age bracket, children are normally admitted to the first grade of compulsory education. The duration of this educational cycle is normally nine years, but they might be the most important nine years in the student's educational years. This cycle is thought of as the "foundation" for the other educational cycles. It is usually the child's first experience with formal education, but it might have a lasting positive or negative effect on his future educational opportunities.

The increase in compulsory education in Jordan has been enormous over the past three decades. The first substantial increase in elementary education came in 1949. This increase was due to the unification of the East and West Banks of the Jordan River. The number of schools, students, and teachers more than doubled in that year. According to UNESCO statistics, 14,902 students attended 97 schools in 1948 as compared to 61,425 students who attended 328 schools in 1949,[4] an increase of 238% in the number of schools and 312% in the number of students, which is the biggest increase ever in a one year period.

Table 8 shows comparative statistics of elementary students by grades and sex for the period from 1958/59 to 1982/83. In this twenty-five year period, elementary education in Jordan has increased, decreased, increased again, and is still increasing.

Table 8 depicts this fluctuating situation of compulsory education in Jordan. Over the eight year period between 1958/59 and 1966/67 school years, the number of students enrolled in the compulsory cycle increased from 255,570 students to 392,171 students, an increase of 136,601 students or 53.4% . A part of this increase was due to the unification of the two Banks and the rapid increase in the population. When Jordan lost the West Bank after the Arab-Israeli war in 1967, the steady increase of enrollment was disrupted. From table 8, we can see that enrollment decreased from 392,171 students in 1966/67 to 254,165 students in 1967/68, a decrease of 138,106 students or 35.2% decrease in one year.

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[4] UNESCO, World Survey of Education, 1957, p. 650.

However, as a result of the war a large number of people left the West Bank to settle in Jordan. This increase in the population forced the educational system to expand again. From 1967/68 to present, enrollment in compulsory education in Jordan has increased every year. According to the Ministry of Education statistics, enrollment in compulsory education reached a record high in 1982/83. In that year (as it can be seen from table 8), the number of students in the compulsory education cycle has reached 654,459 students. This number constitutes 79.8% of the total number of students in Jordan at all levels.

Secondary Education

Depending on the availability of seats, students who successfully pass the Public Preparatory Examination (held at the end of the compulsory education cycle) are usually admitted to the secondary schools. The duration of study in the secondary schools is three years 10th, 11th, and 12th grades. Upon completion of these three years, students are required to take the General Secondary Examination held and prepared by the Ministry of Education. Students who successfully pass this examination are awarded the Secondary Education Certificate which qualifies them to pursue higher education either in Jordan or abroad. There are at least two types of secondary education in Jordan: General and Vocational/Technical.

Table 8

Comparative Statistics of Students by Sex in the Compulsory Cycle for the School Years 1958/59 To 1982/83

School Year	Sex	Elementary Students	Preparatory Students	Grand Total
	T	212836	42734	255570
1958/59	M	138506	32980	171486
	F	74330	9754	84084
	T	210802	40875	251677
1959/60	M	136736	30972	167708
	F	74066	9903	83969
	T	212488	43158	255646
1960/61	M	135865	32174	168039
	F	76623	10984	87607
	T	219988	44659	264647
1961/62	M	138649	32916	171565
	F	81339	11743	93082
	T	237425	49207	286632
1962/63	M	145389	36006	181395
	F	92023	13201	105237
	T	235432	54993	290425
1963/64	M	153795	39816	193611
	F	99837	15177	115014
	T	275177	63327	338504
1964/65	M	162668	44847	207515
	F	112509	18480	130989
	T	295107	68037	363144
1965/66	M	171464	47450	218914
	F	123643	20587	144230
	T	318122	74049	392171
966/67	M	182535	50899	233434
	F	135587	23150	158737

Table 8 Continues

Comparative Statistics of Students by Sex in the Compulsory Cycle for the School Years 1958/59 To 1982/83

School Year	Sex	Elementary Students	Preparatory Students	Grand Total
	T	207609	46556	254165
1967/68	M	120373	31790	152163
	F	87236	14766	102002
	T	229691	53315	512697
1968/69	M	131496	35918	167414
	F	98195	17397	115592
	T	253858	59584	313442
1969/70	M	144516	39640	184156
	F	109342	19944	129286
	T	277619	66702	347321
1970/71	M	155532	42381	197913
	F	122087	24321	146408
	T	298802	70373	369175
1971/72	M	165692	43179	208871
	F	133110	27194	160304
	T	326111	78043	404154
1972/73	M	178695	47222	225917
	F	147416	30821	178237
	T	352696	88241	440937
1973/74	M	191643	52729	244372
	F	161053	35512	196565
	T	371631	100678	472309
1974/75	M	200452	59246	259698
	F	171179	41432	212611
	T	386012	115608	501620
1975/76	M	206618	67388	274006
	F	179394	48220	227614

Table 8 Continues

Comparative Statistics of Students by Sex in the Compulsory Cycle for the School Years 1958/59 To 1982/83

School Year	Sex	Elementary Students	Preparatory Students	Grand Total
	T	402401	124982	527383
1976/77	M	214570	71733	286303
	F	187831	53249	241080
	T	414490	138801	553291
1977/78	M	220416	78507	298923
	F	194074	60294	254368
	T	431107	148329	579436
1978/79	M	227784	82102	537670
	F	203323	66227	269550
	T	448411	158590	607001
1979/80	M	235440	86459	321899
	F	212971	72131	285102
	T	454391	164694	619085
1980/81	M	237813	89581	327394
	F	216578	75113	291691
	T	--	173367	--
1981/82	M	--	93459	--
	F	--	79908	--
	T	473027	181432	654459
1982/83	M	246719	97426	344145
	F	226308	84006	310314

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1967/68, Amman: The National Press, 1968, p. 165 . The Statistical Educational Yearbook, 1974/75, Amman: The Army Press, 1975, p. 119 . The Statistical Educational Yearbook, 1982/83, p. 117, 154 .

General Secondary Education

Students entering secondary schools study all subjects in the 10th grade and then they will be divided into two main streams (majors) available under secondary education. Depending on the student's academic achievement (as measured by grades) in the first secondary grade (10th grade), he/she can major in literature or science. Those students who achieve high grades in the science and mathematics subjects are permitted to enroll in the more prestigious scientific stream, otherwise, they will be enroll in the literary one. But whether it is literary or scientific, general secondary education in Jordan has one main objective, to prepare students for higher education.

Comparative statistics of students in the general secondary education for twenty-five years period are shown in table 9. From the table we can see the rapid increase in secondary education enrollments over the years. Between 1958/59 and 1966/67 school years, the number of students attending secondary schools increased from 12,756 students in 1958/59 to 30,681 students in 1966/67, an increase of 17,925 students or 140.5% increase.

Like all levels of education in Jordan, enrollment in the secondary schools took a sharp decrease in 1967/68. In that year, secondary schools in Jordan lost 9,954 students or a 32.4% decrease. From 1967/68 to present, enrollment in secondary schools have been increasing over the years. Table 9 depicts this steady increase. Enrollment in secondary schools has increased from 20,727 students in 1967/68 to 44,008 students

in 1982/83. In sixteen years, enrollment in secondary schools has increased by 23,281 students, or 112.3% increase.

Table 9 also depicts an interesting phenomenon, namely the increase of the numbers of female students in the secondary education. Due to modernization, industrealization, and urbanization, accompanied by changes of opinions, beliefs, and the increasing demand for female participation in the society, Jordanian females are staying longer in school. From table 9, we can see the increase of female students in the secondary schools. The percentage of females has increased from 18.4% in 1958/59 to an astonishing 48.9% females in 1982/83. The percentage of female students is expected to equal that of males in the near future.

As a matter of fact, and based on the economic conditions in Jordan nowadays, it is my belief that the number of female students might surpass that of males in the secondary schools. As it stands now, a poor economy and high inflation might pressure students (especially those in the secondary level) to drop out of schools and seek employment. In traditional Jordanian society, usually more males than females might leave school because the male is considered to be the bread winner of the family.

Table 9

Comparative Statistics of Students in the General Secondary Education by Grades, stream, and Sex from 1958/59 to 1982/83 School Years

School Year	Sex	Grand Total	First Grade	Second Grade		Third Grade	
				Literary	Scientific	Literary	Scientific
	T	12756	6999	5324		469	
1958/59	M	10412	5580	4374		458	
	F	2344	1402	931		11	
	T	13525	7286	5536		736	
1959/60	M	10679	5615	4364		713	
	F	2846	1651	1172		23	
	T	13487	6712	2456	1819	263	534
1960/61	M	10454	5147	3268	1416	133	490
	F	3033	1565	988	403	33	44
	T	19385	8027	3757	2012	4063	1526
1961/62	M	14781	5991	2759	1622	3118	1291
	F	4604	2036	988	390	945	235
	T	22363	9152	4499	2751	4222	1839
1962/63	M	17064	6962	3143	2196	3199	1564
	F	5299	2160	1256	555	1023	275
	T	26683	10755	5330	3076	4942	2580
1963/64	M	20740	8128	3903	2550	3749	2140
	F	6213	2627	1427	526	1193	440
	T	29195	10917	5969	3609	5573	3127
1964/65	M	22204	8188	4138	2947	4093	2658
	F	6991	2729	1651	1651	1480	469
	T	30291	10848	6026	3617	6247	3553
1965/66	M	22547	7752	4355	2963	4513	2964
	F	7744	3096	1671	654	1743	589
	T	30681	9922	5783	3933	6184	3858
1966/67	M	21748	7030	3887	3144	4515	3171
	F	7933	2892	1896	789	1669	687

Table 9 Continues

Comparative Statistics of Students in the General Secondary Education by Grades, stream, and Sex from 1958/59 to 1982/83 School Years

School Year	Sex	Grand Total	First Grade	Second Grade		Third Grade	
				Literary	Scientific	Literary	Scientific
	T	20727	8219	3152	2486	4037	2833
1967/68	M	15275	5875	2122	1985	2941	2352
	F	5452	2344	1031	501	1096	481
	T	21824	7663	4391	2859	3798	3113
1968/69	M	16134	5585	2933	2203	2810	2603
	F	5690	2078	1458	656	988	510
	T	22901	8286	3787	3131	4691	3006
1969/70	M	16422	5752	2504	2470	3320	3776
	F	6470	2534	1283	661	1371	630
	T	27952	13073	4270	3280	3935	3394
1970/71	M	19672	8899	2818	2515	2691	2749
	F	8280	4174	1452	765	1244	645
	T	29071	11277	6404	3887	4253	3250
1971/72	M	19962	7663	4048	2901	2800	2550
	F	9109	3614	2356	986	1453	700
	T	30985	10811	5361	4433	6225	4155
1972/73	M	20971	7123	3357	3303	3965	3223
	F	10014	3688	2004	1130	2260	932
	T	33338	12845	4944	5173	5575	4801
1973/74	M	21691	7874	2883	3790	3513	3631
	F	11647	4971	2061	1383	2062	1170
	T	37154	14518	6052	5829	5141	5614
1974/75	M	23138	8617	3216	4072	3040	4193
	F	14016	5910	3836	1757	2101	1421
	T	42137	16224	6951	6594	6186	6182
1975/76	M	25394	9474	3499	4641	3354	4426
	F	16743	6750	3452	1953	2832	1756

Table 9 Continues

Comparative Statistics of Students in the General Secondary Education by Grades, stream, and Sex from 1958/59 to 1982/83 School Years

School Year	Sex	Grand Total	First Grade	Second Grade		Third Grade	
				Literary	Scientific	Literary	Scientific
	T	53171	23517	7846	7532	7245	7031
1976/77	M	31460	13636	3788	5321	3691	5024
	F	21711	9881	4058	2211	3554	2007
	T	62115	23327	12258	9300	8826	8404
1977/78	M	36930	13836	6087	6475	4448	6084
	F	25185	9491	6171	2825	4378	3220
	T	73493	29266	12089	9559	12461	10118
1978/79	M	42887	16424	5786	6975	6262	7440
	F	30606	12842	6303	2584	6199	2678
	T	80173	30894	15032	11859	12095	10293
1979/80	M	45291	16329	6897	8244	6312	7509
	F	34882	14565	8135	3615	5783	2784
	T	87673	32874	15404	12014	14640	12741
1980/81	M	47953	17058	6710	7930	7170	9085
	F	39720	15816	8694	4084	7470	3656
	T	90583	33849	16872	12603	14673	12586
1981/82	M	47110	17075	6980	7805	7063	8187
	F	43473	16774	9892	4798	7610	4399
	T	94008	35310	15845	13297	16254	13302
1982/83	M	48015	17331	6411	8271	7162	8840
	F	45993	17979	9434	5026	9092	4462

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1967/68, Amman: The National Press, 1968, p. 219. The Statistical Educational Yearbook, 1974/75, Amman: The Army Press, 1975, p. 185. The Statistical Educational Yearbook, 1982/83, p. 191.

Vocational and Technical Secondary Education

Meanwhile, it is the main objective of the general secondary education to prepare students for higher education in the academic fields, while the main objective of the vocational and technical education is to produce the skilled personnel to hold middle-level positions in the Jordanian society.

On the average, students who successfully pass the Public Preparatory Examination but their low grades do not qualify them to enroll in the general secondary schools (academic), usually have no choice but to enroll in vocational and technical schools. So it could be argued that vcational and technical education attracts mostly the dropouts of the formal system and the academically low achievers. Therefore, there is usually a stigma attached to this type of education and the students enrolled in it.

Enrollment statistics of the major three types of vocational and technical education in Jordan can be seen in tables 10, 11, and 12. These tables show the slow increase of agricultural, commercial, and industrial education, respectively.

Table 10 shows comparative statistics for agricultural schools, teachers, students, and graduates for the years 1958/59 to 1982/83. Agriculture is considered to be the largest productive sector of the Jordanian economy. According to the Ministry of Culture and Information statistics, about 40% of the total labor force in Jordan work in agri-

culture and/or agricultural related areas. Despite this fact only a few hundred students attended agricultural schools over the years.

From table 10 we can see that the enrollment in agricultural schools has actualy decreased instead of increased in the last few years. The number of students has decreased from 611 in 1975/76 to 308 in 1982/83, a 49.6% decrease. Considering the importance of this field, this low enrollment might be alarming. Equally alarming is the absence of females in agricultural schools, despite the fact that women work side by side with men in the fields.

Low enrollment and the absence of females might be attributed to two facts: first, Jordanians on the average are using primitive means in farming their land. As a result, the people believe that one does not have to go to school to be able to work in the fields; second, women cannot major in agricultural studies in the secondary schools in Jordan. This type of education is only offered to male students.

Table 10

Comparative Statistics of Agricultural Schools, Teachers, Students, and Graduates for the Years 1958/59 To 1982/83

School Year	Schools	Teachers	Students	Graduates
1958/59	1	11	133	23
1959/60	1	8	146	32
1960/61	1	10	147	23
1961/62	1	15	187	65
1962/63	1	14	194	66
1963/64	1	18	213	58
1964/65	2	17	210	61
1965/66	3	21	271	87
1966/67	3	20	253	56
1967/68	2	14	232	88
1968/69	2	14	262	67
1969/70	2	16	295	56
1970/71	2	14	287	93
1971/72	2	15	274	98
1972/73	2	27	366	75

Table 10 Continues

Comparative Statistics of Agricultural Schools, Teachers, Students, and Graduates for the Years 1958/59 To 1982/83

School Year	Schools	Teachers	Students	Graduates
1973/74	2	23	438	68
1974/75	2	40	591	158
1975/76	2	37	611	161
1976/77	2	48	608	204
1977/78	2	45	552	189
1978/79	2	43	492	167
1979/80	2	25	336	125
1980/81	1	31	349	78
1981/82	1	15	334	81
1982/83	-	16	308	95

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1967/68, Amman: The National Press, 1968, p. 245. The Statistical Educational Yearbook, 1974/75, Amman: The Army Press, 1975, p. 216. The Statistical Educational Yearbook, 1982/83, p. 228.

The outlook for commercial education is quite different. Table 11 shows comparative statistics of commercial schools, teachers, students, and graduates for the years 1967/68 to 1982/83. Two points are worth noting: the rapid increase of commercial education over the years and the participation of females in this type of education.

From table 11 we can see that the number of students has increased from 848 students in 1967/68 to 7805 students in 1982/83, an increase of 6957 students, or 820% increase. Female participation in this type of education is also encouraging. Table 11 shows that the number of female students has increased very rapidly over the years. The number of female students reached 3897 in 1982/83 which is almost 50% of the total enrollment in commercial education.

Table 12 depicts comparative statistics of industrial and women education schools, teachers, students, and graduates for the years 1973/74 to 1982/83. As is the case in agricultural education, the industrial stream is only offered to males. The female figures shown in the table are for those female students majoring in women studies (home economics) which is included under industrial education.

The table shows that the number of students enrolled in industrial education has far exceeded the enrollment in commercial and agricultural education. This fact by itself is an encouraging factor since graduates of this field can start fullfiling the needs of Jordanian society, where industrialization is an important part of the economic development plans.

Table 11

Comparative Statistics of Commercial Schools, Teachers, Students, and Graduates for the Years 1967/68 To 1982/83

School Year	Sex	Ministry of Education			
		Schools	Teachers	Students	Graduates
1967/68	M	-	10	734	196
	F	-	2	114	---
	T	-	12	848	196
1968/69	M	-	11	944	213
	F	1	5	321	31
	T	1	16	1265	244
1969/70	M	1	30	932	236
	F	2	19	497	62
	T	3	49	1429	298
1970/71	M	3	41	985	372
	F	2	26	651	184
	T	5	67	1636	556
1971/72	M	2	35	727	254
	F	2	27	671	202
	T	4	62	1398	456
1972/73	M	2	45	809	206
	F	2	35	821	153
	T	4	80	1630	359
1973/74	M	2	52	1160	194
	F	3	45	1044	202
	T	5	97	2204	396
1974/75	M	2	73	1560	286
	F	3	59	1342	331
	T	5	132	2902	619

Table 11 Continues

Comparative Statistics of Commercial Schools, Teachers, Students, and Graduates for the Years 1967/68 To 1982/83

School Year	Sex	Ministry of Education			
		Schools	Teachers	Students	Graduates
1975/76	M	3	83	1955	499
	F	4	63	1539	399
	T	7	146	3494	898
1976/77	M	3	95	2070	606
	F	3	72	1622	433
	T	6	167	3692	
1977/78	M	3	95	1971	656
	F	4	84	1717	536
	T	7	179	3688	1192
1978/79	M	3	103	1963	528
	F	4	81	1606	455
	T	7	184	3569	983
1979/80	M	3	111	2166	583
	F	4	90	1738	539
	T	7	201	3904	1122
1980/81	M	6	133	2613	592
	F	4	97	2314	418
	T	10	230	4927	1602
1981/82	M	4	151	3236	682
	F	4	122	2892	479
	T	8	273	6128	1161
1982/83	M	5	180	3908	867
	F	3	147	3897	910
	T	8	327	7805	1777

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1974/75, Amman: The Army Press, 1975, p. 213. The Statistical Educational Yearbook, 1982/83, p. 223.

Table 12

Comparative Statistics of Secondary Industrial and Women's Education Schools, Teachers, Students, and Graduates for the Years 1973/74 To 1982/83

School Year	Sex	Min. Educ., Voc.Tra.Corp., UNRWA, and Private Sch.			
		Schools	Teachers	Students	Graduates
1973/74	T	2	142	1591	576
	M	2	135	1511	546
	F	-	7	80	30
1974/75	T	2	157	1911	587
	M	2	145	1723	557
	F	-	12	188	30
1975/76	T	3	152	2172	715
	M	3	137	1975	632
	F	-	15	197	83
1976/77	T	4	227	3020	704
	M	3	208	2752	596
	F	1	19	268	108
1977/78	T	5	289	3953	825
	M	4	252	3372	685
	F	1	37	581	140
1978/79	T	5	323	4321	925
	M	4	263	3567	525
	F	1	60	754	400
1979/80	T	5	371	4681	1430
	M	4	308	4011	1112
	F	1	63	670	318
1980/81	T	-	518	7395	1891
	M	-	428	6434	1615
	F	-	90	961	276
1981/82	T	7	588	9076	2737
	M	6	481	7657	2159
	F	1	107	1419	578
1982/83	T	6	588	10503	3445
	M	6	507	9200	2771
	F	-	81	1303	674

Source Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/83, p. 224.

On the average, enrollment in vocational and technical education is very low compared to general (academic) education. The total number of students attending vocational and technical education (women studies included) in 1982/83 was 16,616 students. Compared to the 94,008 students who attended the general schools in the same year (see table 9), the percentage of enrollment in vocational and technical education was 19.8% only. This percentage on one hand is an ecouraging improvement over the estimated 2.6% in 1965-1970 and the 3.0% in 1971- 1974.[5] On the other hand, however, it still accounts for less than one-fourth of the total general secondary enrollment.

This low enrollment in vocational and technical education can be attributed to at least three main factors: societal, educational, and economic.

Jordanians in general are academicly oriented people. They inherited from the "Ottomans" the idea that vocational and technical education is fit only for the children of the poor, despite the fact that Islam respects work and encourages people to acquire skills and work with their hands. According to the prophet Mohammad "No man eats better food than he who eats out of the work of his hands."

It could be argued that either by design or by default the educational system in Jordan encourages students to attend general academic schools and stay away from the vocational and technical ones. As mentioned earlier, vocational and technical schools attract only the drop-

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[5] Byron G. Massialas and Samir A. Jarrar, Education in the Arab World (Praeger Publishers, New York, 1983), pp. 170-171.

outs of the academic schools. This "social stigma" combined with "student's low esteem" and low financial rewards which is usually attached to manual labor, played and is still playing a major role in detering students from vocational and technical education.

These societal and educational factors could be the main obstacles to the slow expansion of vocational and technical education. The Government and the educators in Jordan have been trying for years to change this damaging phenomenon. In my opinion, for any change to occur it has to come from the top-down and not from the bottom-up. In other words, it is not enough to force students to enroll in vocational and technical education for they might dropout as has been the case in Jordan for many years. It is necessary for the educational system to encourage students rather than force them to attend vocational and technical schools. This can be done by emphasizing the positive aspects and the values of this type of education to the students as well as to the society as a whole.

Vocational and technical personnel are very much needed in Jordanian society. I project that in the near future the financial values of vocational and technical education will outweigh the general academic one. This projection is based on the fact that Jordan has been developing its industrial sector very rapidly and there has been an increased need for personnel to work in this growing industry. Furthermore, it is my belief that the supply and demand issue will play a major role in changing this phenomenon. As the educational system produces more graduates in the academic fields and less in the vocational and technical fields the value of the first will certainly decrease and the value of the second will increase.

This is similar to what Green calls "the law of the zero correlation".

> the law states simply that there is a point in the growth of the system at which there is no longer any correlation between educational attainment and either the distribution of educationally relevant attributes in the population or the distribution of non-educational social goods ordinarily associated with educational attainment[6]

Although general academic education in Jordan did not reach the "zero correlation", and I doubt if it ever will, it is certainly coming close.

Higher Education

For the purpose of this study, the term higher education refers to any level of education attained over and beyond the secondary level (12th grade). Institutions of higher education or higher learning are fairly new in Jordan. It was not until 1952 that the Ministry of Education decided to establish the first two teacher-training institutes in the country, one in the West Bank for women and the other in the East Bank for men.

Prior to the establishment of these two institutions, teachers for the most part did not have any professional training in Jordan. A high school diploma was the only requirement for teaching at the elementary level, and teachers for the secondary schools were mostly graduates of foreign institutions. Furthermore, qualified teachers from the neighboring countries were recruited to teach in Jordan.

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[6] Thomas F. Green, Predicting the Behavior of the Educational System (Syracuse, New York, Syracuse University Press, 1980), p. 10.

With the rapid increase of the number of schools and students, there was an increasing need for trained teachers. In other words, the expansion at the lower levels of the educational system forced the expansion at the higher levels. Also, and more importantly, there was a genuine interest in higher education among the Jordanian people. Because the demand for higher-level manpower far exceeded the supply, people pursued higher education as an avenue to secure good jobs, careers, social status, and more importantly money.

Due to the above mentioned reasons, and recognizing the need for higher institutions, a Royal Decree was issued calling for the establishment of the University of Jordan in 1962. The University which started with one faculty, 167 students, 7 staff members, and only one building managed to graduate 15,253 students in a twenty year period. Rapid development of the University of Jordan can be seen in the dramatic increase in the number of students and faculties. As of the 1982/83 academic year, the total number of students reached 11,549 with more than 627 staff members and 10 faculties.

Jordan University is not the only university in the country. In 1976, Yarmouk University was established to share the responsibility of accomodating the increasing number of high school graduates who wished to pursue a higher education. The University's aim is to transfer technology to Jordan through education and research instead of by merely buying it from the industrialized world. These objectives flowed from a determined effort to overcome Jordan's modest resources through multifunctional action. Yarmouk University, which started with an enrollment of

7000 students, plans to provide for some 20000 students in the near future. Recently, a third university has been established in Jordan. Mu'ta University is expected to accomodate some 5000 students.

Planning for higher education is a continuing process in Jordan. When one considers that by 1990 there will be an estimated number of more than 60000 graduates from Jordanian high schools, one might expect that a large number of them might wish to pursue higher education. Therefore, advance planning for higher education cannot remain stagnant.[7]

Due to the fast growth of secondary school graduates seeking admission to universities and/or the limited spaces available in these universities, they were and still are very selective in their admission procedures, i.e only admitting those students with the highest academic achievement. More students have turned and are turning to community colleges for higher education. Due to this demand, the government responded by establishing more colleges. Also due to this demand an interesting phenomenon developed in the country. Private investors saw an opportunity of economic growth in higher institutions and established their own

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[7] Projections are based on the steady increase of high school graduates. According to the Ministry of Education statistics, 13222 students participated in the Public Secondary Examination in the academic year 1973/74 out of which 9509 students or 71.9% of them graduated with a high school diploma. Ten years later, the number of students participated in the Exam reached 45808 students, of which 28173 or 61.5% graduated with a high school diploma. Although the percent of success decreased from 71.9% to 61.5%, the number of high school graduates increased by 18664 or 196.3% increase . Assuming that enrollment, percent of success, and current birth rate will stand still (although every indication shows that they will increase), over 60000 students will graduate from Jordanian high schools in the year 1990. It should be mentioned here that these projections are for the East Bank only. Adding to this students from the West Bank, the number of graduates will be even higher.

private colleges offering the students a variety of programs to select from.

Table 13 shows comparative data of the number of colleges, students, and graduates for the 1973/74-1982/83 period. It could be argued that this period witnessed the most dramatic and rapid increase in higher education in the country. Beside the establishment of two universities, table 13 shows that the number of community colleges has increased from 7 colleges in 1973/74 to an amazing number of 44 colleges in 1982/83. Also the number of students has increased from 2893 students to 28167 students in a ten year period. Although these numbers do not have value in absolute terms, nevertheless, they depict the rapid increase and/or development of this important level of education. Because in the final analysis the wealth of any nation can be measured by their progress in developing their educational system.

Table 13

Comparative Data of Colleges, Students, and Graduates

for the 1973/74-1982/83 Period

School Year	Sex	No. of Institutions	No. of Teachers	Students	Graduates
	T	7	142	2893	1346
1973/74	M	4	84	1873	917
	F	3	58	1020	429
	Co.Ed	-	--	----	---
	T	7	162	3314	1657
1974/75	M	4	97	2050	1074
	F	3	65	1264	583
	Co.Ed	-	--	----	---
	T	11	228	5104	1583
1975/76	M	6	141	3234	910
	F	4	87	1870	673
	Co.Ed	1	--	----	---
	T	11	308	7006	3294
1976/77	M	6	187	4283	2149
	F	4	121	2723	1145
	Co.Ed	1	---	----	----
	T	11	337	6543	3326
1977/78	M	6	193	3523	1843
	F	4	144	3020	1483
	Co.Ed	1	---	----	----

Table 13 Continues

Comparative Data of Colleges, Students, and Graduates for the 1973/74-1982/83 Period

School Year	Sex	No. of Institutions	No. of Teachers	Students	Graduates
1978/79	T	11	309	6816	3038
	M	4	172	2908	1416
	F	4	137	3908	1622
	Co.Ed	3	---	----	----
1979/80	T	16	362	8621	3561
	M	3	204	2410	1347
	F	5	158	6211	2214
	Co.Ed	8	---	----	----
1980/81	T	23	566	19446	5882
	M	2	378	9921	2617
	F	6	188	9525	3265
	Co.Ed	15	---	----	----
1981/82	T	42	799	25303	6797
	M	2	574	14733	3022
	F	6	225	10570	3775
	Co.Ed	33	---	----	----
1982/83	T	44	1155	28167	6692
	M	2	931	16114	2974
	F	6	224	12053	3718
	Co.Ed	36	---	----	----

Source: Jordan, Ministry of Education, The Statistical Educational Yearbook, 1982/83, p. 247.

Summary

The expansion of the educational system in Jordan has been described, documented, and analyzed. In describing the expansion of the system it became obvious that the system did indeed expand. It was also asserted that the system is still expanding very rapidly over the years. It became equally obvious that the system expanded in each and every way possible. Keeping in mind the eight "modes of expansion" that Green identified, it could be argued that all these "modes of growth" can be clearly seen and/or reflected in the way the educational system in Jordan expanded.

Although all eight "modes of growth" were and are reflected in the system's expansion, it became evident that modes number one and three dominated the way the system expanded. It was clearly shown that the educational system expanded to accomodate the large number of school-age children who evidently wanted to be educated (mode #1). It was also shown that the system expanded by adding levels at the top and the bottom of the educational ladder (mode #3).

In short, this chapter addressed the issue of <u>how</u> the educational system in Jordan expanded. Causes and mojor consequences of the expansion will be discussed in the next chapter.

CHAPTER IV

THE EDUCATIONAL EXPANSION
CAUSES AND CONSEQUENCES

Although there is nothing unusual about the system expanding under normal conditions, it could be argued that the case of the educational expansion in Jordan was somewhat unusual. The system did not grow or expand under normal conditions. Without any indications, and more importantly, without any preparations, the system was faced with the task of educating thousands of new students at one time.

As mentioned earlier, one of the aftermaths of the Arab-Israeli War was the migration of hundreds of thousands of Palestinians to Jordan. Furthermore, when Jordan was extended to include the West Bank in 1950, there was a large increase in the number of schools, students, and children of school-age whose education became the responsibility of the educational system in Jordan. In other words, the system expanded by assuming the educational responsibility of more people inside and outside its geographical boundaries. Besides educating the children of the Palestinian refugees who migrated to Jordan, the system was also responsible for educating the Palestinian children in the West Bank which became a part of Jordan after the War. In this instance, it could be argued that the Palestinians played the major role in the expansion and/or the development of the educational system in Jordan.

When this "human and/or educational explosion" took place, Jordan was a newly developing country. The sudden demand for education came only three years after the country's independence. The country as a whole was not ready for sudden educational expansion. With this in mind the question becomes, why did the educational system in Jordan expand? More importantly, what are the major causes and/or reasons for the expansion?

In describing the expansion of the educational system in Jordan, it may seem that the major cause or reason for the expansion was the substantial increase in the number of children of school age. Although this is an important factor, Green argues that "the mere increase in the number of children of school age does not constitute by itself a sufficient reason for the expansion." According to him, "the demographic facts need to be accompanied by certain other assumptions or social beliefs."[1]

In general, when faced with an increase in the number of children of school age, society may have at least two options. It might expand the educational system to accomodate each and everyone who wants an education, or it might choose not to expand the system and only educate some of the children, in other words, be selective. Whether society choses the first or the second option depends on its social beliefs, Green argues.

To these social beliefs or social factors, I propose the addition of another factor, namely, the economic factor. For even if the society wants to expand its educational system, the decision is usualy made on

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[1] Thomas F. Green, Predicting the Behavior of the Educational System (Syracuse, New York, Syracuse University Press, 1980), p. 11.

the basis of the need for this expansion and, more importantly, whether that society can afford that expansion. Even though societies might believe in spending the money and invest in the educational development and expansion, the odds are that they are not going to do it if they do not have the money.

To illustrate, let us imagine two hypothetical societies, A and B. Both societies are confronted with "demographic changes" i.e. substantial increase in the number of children of school age. Let us further imagine that both societies share the same social beliefs that Green talked about; "it is better that all children have some education within the system, however defective, than that some have none at all."[2] One major difference between the two societies is their economic condition. Let us suppose that society A is a rich society and society B is a poor one. Under these conditions, one might propose that society A has a much better chance of expanding its educational system than society B.

The point that I am trying to make is that economic conditions or economic prosperity might be the deciding factor in the expansion and/or contraction of the educational system or any system for that matter. For even though society B believes in providing for educational opportunity for all children, its poor economic conditions might force it to be selective rather than expand its educational system. In short, it takes more than "demographic changes" and "social beliefs" to expand the system. It takes a financial commitment. In this instance, it could be argued that money is a necessary condition for the expansion of the sys-

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[2] Ibid., p. 11.

tem. Together with "demographic changes" and "social beliefs" they constitute necessary and sufficient conditions for the system's expansion.

Although these might be the major reasons and/or factors for the the system to expand, one might argue that they mostly apply to the lower levels of the educational system because there are other important variables and factors influencing the expansion of the higher levels of the system. It could be argued that the "supply and demand" issue is one of the most important factor influencing the expansion of higher education in Jordan if not anywhere in the world. Although supply and demand is an important factor in the system expansion in general, its effect is clearly seen and/or associated with the higher levels of the system.

With this in mind, and in light of Green's theory on the behavior of the educational system, let us examine the reasons for the educational expansion in Jordan. More precisely, let us see if the reasons or causes of expansion that Green identified do apply to the case in Jordan.

It could be argued that the three factors mentioned earlier were the major reasons or causes for the educational expansion in Jordan. The first factor was the "demographic change" which took place in the late 1940's and early 1950's. As mentioned before, one of the consequences of the 1948 Arab-Israeli War was the migration of thousands of Palestinian refugees to Jordan. Together with the unifications of the two Banks, they form the largest demographic change ever to happen in the history of Jordan.

The second factor in the expansion was the strong "social belief" in the values of education. It should be noted here that these social beliefs were not formulated as "it is better that all children have some education", obviously not all school age children were in schools. The social beliefs stemmed from the fact that education was (still is) highly correlated with occupation and income. It became known to the people that those who made it away from home (the Palestinian refugees) were those with an education.

The economy in Jordan at that time was poor and unstable. The massive Palestinian migration made it even worse. Most of the jobs available then were hard labor jobs symbolized by farming and agricultural related jobs. Those with education rightly occupied the top of the occupational ladder. Parents (mostly illiterates) saw an opportunity in putting their children through schools hoping that they might get better jobs in the future.

Mainly because of these two reasons, the educational system in Jordan witnessed its first significant expansion in 1949. Although this expansion took place mostly in the lower levels of the system, it could be argued that it was the greatest increase in the number of elementary students ever to occur in the history of Jordan. The number of students increased from 14,902 in 1948 to 61,425 in 1949. There was an increase of 46,523 students in one year. This increase might not have any significant value in a big country like the United States for example, but in a small country like Jordan this much increase is very significant. To accomodate this increase, the number of schools rose from 97 in 1948 to

328 in 1949.[3]

Although the system did expand, it was almost impossible for it to overcome or survive this sudden expansion. Schools, both public and private, tried to meet the demand for education, but they were overwhelmed and/or inundated. This condition existed until 1951 when the United Nations represented by its well known organizations (UNESCO) and (UNRWA) moved to assume the major responsibility for the education of the Palestinian children. The role of the United Nations in educating the Palestinian children could be the most important factor in helping the system overcome and survive the expansion. That is to say, without the assistance (financial and otherwise) of the United Nations it would be difficult if not impossible for the educational system to survive the expansion. The role of the United Nations can be seen in its main objectives:

1) To provide an elementary education to every refugee boy and girl.

2) To provide secondary education to as many refugee children as possible to correspond with the rising proportion of non-refugee children receiving secondary education in the host countries (Jordan, Syria, Lebanon, and Gaza Strip).

3) To grant university scholarships to as many outstanding refugee students as the budget permits.

4) To place increasing emphasis on vocational training including agricultural training.

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[3] UNESCO, World Survey of Education (Paris: UNESCO Publications, 1957), p. 606.

5) To provide the means whereby as many as possible refugee adults of both sexes become literate.[4]

It could be argued then that all three factors, namely demographic changes, social beliefs, and economic factors represented by the assistance of the United Nations, caused the educational system to expand and survive the expansion in Jordan. But as mentioned earlier these factors or reasons mostly apply to the lower levels of the system. The question now becomes: what about the higher levels of the system? What are the major causes or reasons influencing the expansion of the higher levels of the educational system? Can we assume that expansion of the lower levels will necessitate expansion of the higher levels? If yes, then what is the relationship between the levels of the system? More importantly, what is the relationship (if any) between the "modes of growth" of the system?

Since the 1950's the expansion of the educational system in Jordan has been extremely rapid. Although the expansion of the system started at the lower levels, it could be argued that the expansion and/or development of the lower levels of education generated pressure for the expansion of higher educaion. It hardly existed in the early 1950's, but is now available to many men and women.

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[4] Shubbak, Musa I, "The Development of the Jordanian Educational System 1952-1967" (Ph.D Dissertation, Southern Illinois University, 1971), p. 118.

Besides the pressure from the lower levels, there were and still are other factors affecting the expansion of higher education in Jordan. Among these are: first, the fact that the Government and the public view higher education as the right of the many and not the privilege of the few; second, realizing the inadequacy of the specialized manpower resources needed for the development of the country, the Government aided in the expansion of higher education by establishing more higher institutions. In this regard, higher education is not viewed as a luxury, but as a vital necessity to provide urgently needed specialists. Third, since most higher institutions did not charge fees, this encouraged students to pursue higher education. Fourth, is the genuine interest and the huge investment of the private sector in higher education. Fifth, and more important is the fact that the demand for graduates has been enormous over the last thirty years.

Although it could be argued that all of these factors demanded the expansion of the higher levels of the educational system in Jordan, the last two factors deserve further elaborations. As mentioned earlier, the society's interest in education in general and higher education in particular developed as the people viewed education (especially higher education) as a means to gain employment. Consequently, it became the ultimate goal of the students (not to mention their parents) to be accepted in a higher institution and get a degree that will guarantee a good job, respectable social status, and above all, financial security.

The correlation of education with occupation came as a result of the demand for trained manpower. It is very important to note here that this

demand was not in Jordan alone, but also in neighboring oil-producing Arab countries. As a matter of fact, the volume of the Jordanian society demand was but a small fragment compared to that of the oil-producing Arab countries. With the discovery of oil, these countries were and to a much lesser degree still are in great need of trained manpower needed for the development of their countries.

It could be argued, then, that the educational system in Jordan did not produce graduates to satisfy its own needs but also the needs of other countries. That is to say that the system did not expand under normal conditions. For if this were the case, probably it might have stopped expanding or even contracted many years ago since Jordan is a very small country with meager natural resources and surely does not need considerable expansion of its educational system.

The need for graduates and/or trained manpower in the oil-producing Arab countries, coupled with the low government salary scale and the lack of alternative employment opportunities in Jordan, caused a massive migration of graduates who saw a bright opportunity and/or future in these countries. This massive migration is what has been refered to as the "Brain Drain" problem or issue. What is important here is that the migration of many graduates from Jordan did not stop or even discourage other students from pursuing higher education and/or cause the system to contract. Instead, those who found employment outside Jordan began sending a percentage of their salaries to their families who in turn invested some of it in the education of other family members and caused the system to expand even more.

From what has been discussed, it can be seen that the supply and demand issue coupled with society's belief in the values of education and the return on investment in it are the most important reasons and/or factors in the expansion of higher education in Jordan.

Now the important question becomes, where are these educational developments taking the country? More important, what are the major consequences of the educational expansion on the country?

From the data in chapter three, it is evident that the Jordanian educational institutions have witnessed impressive gains in the last three decades. These gains were the result of a large number of students who enrolled in these institutions. Despite these gains, however, Jordanian society is suffering from shortages of trained manpower in some of its developing sectors. To offset or balance this shortage, Jordan has to rely on an estimated 150,000 professionals, semi-professionals, and laborers from some Asian and Arab countries. This is despite the fact that there are an estimated 325,000 Jordanians working in the oil-producing Arab countries alone. Furthermore, despite the availability of a number of positions in some areas or fields i.e. vocational/technical areas, there is an over supply of doctors, engineers, and graduates in general (both university and college graduates).

The situation then is an unusual one. How can a country "export" and "import" trained manpower at the same time? Also how can the labor market of a country have a shortage and surplus at the same time? In light of this situation, one cannot help asking the question, what went wrong?

How can the educational system in Jordan cater to the needs of other countries and/or systems at the expense of its own needs?

In view of this, speculation arises on what went wrong and/or what is going to happen. It is my belief that there are at least two main factors or reasons behind this situation. I shall refer to these factors as the "outside" and the "within" factors.

The outside factors are symbolized or represented by the open market of the oil-producing Arab countries available to the graduates from Jordan. Due to this open market policy and the availability of jobs in these countries the relationship or correlation was established between what Green has termed "second order educational benefits" and "non-educational social benefits". The first is represented by such things as "Certificates, Diplomas, Transcripts, and Licenses," the second by "Income, Occupational Opportunity, Status, and Prestige."[5] As mentioned earlier, the relationship was established in the form of "to get a job you have to have an education (represented by a Certificate or Diploma)." There was no emphasis on any particular type or subject matter of education. There was a great demand for all types of education. However, this demand for all types of education is not the problem, for if Jordanian students enrolled or majored in all subjects and/or fields, the problem would probably not exist.

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[5] Thomas F. Green, Predicting the Behavior of the Educational System (Syracuse, New York, Syracuse University Press, 1980), p. 47.

As mentioned before, Jordanians are academically oriented people. On the average, they tend to place a high value (not necessarily material value) on the academic subjects and a low value on the vocational and technical ones. Under these circumstances, Jordanians were and still are in pursuit of a higher education mainly in the academic related fields; they do not have any interest in vocational and technical training regardless of the future and/or the country's needs.

Can we then blame the students and/or their families for this problem? The answer must be no. For it is the student's choice and privilege to study whatever fields or subjects he prefers as long as he accepts the consequences of his act. To this I should add that the problem we are facing, i.e. the shortage in trained manpower in the vocational and technical fields or areas, is fairly new in Jordan. It came as a result of the rapid socio-economic developments during the last decade only.

With this in mind, let us turn to the "within" factors. These are factors which are operating within and/or controlled by the educational system. Also they refer to the personnel in the system who are responsible for formulating and/or implementing the policy for the educational system in Jordan.

From what has been discussed, it is obvious that the educational expansion which took place during the last three decades in Jordan has suffered from the lack of long term planning. The system has failed to establish some kind of balance between the supply of graduates and the

demand of the Jordanian labor market. In other words, the needs of the the labor market in Jordan were overlooked during the process of expansion.

Can all the blame be directed towards the educational system? Under normal circumstances one would tend to think so, but as I stated earlier the case of education in Jordan is an exceptional and unusual one. Beside the fact that the system did not expand under normal conditions, many Jordanian students did not graduate from Jordanian institutions. A large number of graduates were the product of other educational systems abroad which means that the system in Jordan did not have any control as to the course of study the student might pursue. However, the educational system in Jordan is not by any means free of all the responsibilities because educational related problems inside Jordan are the responsibility of the educational system and the system alone.

Another problem caused by the massive increase or the expansion of the educational system is that of graduates who are working in the oil-producing Arab countries. As mentioned earlier, for so many years Jordanians have been seeking jobs in these countries. As a matter of fact, due to the high salaries and benefits in these countries, working there was and still is the first choice for graduates. It is their ultimate dream because of financial security not just for the person working there but also for his family.

The problem, however, is not that many Jordanians are working outside Jordan and in these countries; it is in the interest of the society that

they work there. This interest stems from the fact that they have an estimated gross revenue of about JD 475 million (more than $1.2 billion) and a large amount of this money is sent back to Jordan and eventually used in the development of the country. The problem which started to surface recently is that these countries are beginning to terminate the work contracts of some of the graduates whose services are no longer needed and/or replacing them with their own people who are being trained to do the same job. Although this phenomenon is not widespread yet, it is expected to reach its peak in the late 1980's and early 1990's.

In light of this problem, it is not too unrealistic to suggest that working in the oil-producing Arab countries has only delayed the problem of unemployment faced by Jordanian graduates and postponed it for a few years (the number of years that these graduates are allowed to work outside Jordan). It could be argued, then, that the system has only complicated the issue and multiplied its magnitude for when these graduates eventually return to Jordan, they will be faced with the problem of unemployment. Even if some of them find employment inside Jordan, it will be almost impossible for them to adjust to the low salaries prevalent there.

Thus far it has been shown that some of the major consequences of the educational expansion are an over-supply of graduates in general, shortages in trained manpower essential for the development of the country (especially in the vocational and technical areas), and finally a projected high rate of unemployment among graduates in general (especially among doctors, engineers, graduates in humanities and social sciences,

and graduates of community colleges. It should be noted here that the problem of unemployment has already started in Jordan.

Although these are the major consequences of the educational expansion for the society in general, there are also some major consequences for the educational system as well. As mentioned earlier, for so many years the educational system in Jordan was forced to expand under the pressure of the large increase in the number of students. This expansion, however, can be described as mainly a quantitative expansion rather than a qualitative one. The expansion did produce a large number of students and/or graduates but there was little regard if any for the qualitative aspects of this expansion. It could be argued that the system failed to diversify its programs to ensure some kind of balance between the supply of graduates and the demand of the country.

This trend was mainly due to the open admission policy adopted by the government and the absence of long term planning in general. Although this trend affected education in general, its effect can be clearly seen particularly in the institutions of higher education. Despite the impressive gains in the number of students, it could be argued that these gains have affected the growth of these institutions in a negative rather than a positive way. From the discussion it became evident that these institutions have failed to instill in their students the values of working in the country or serving the needs of it. In other words, they failed to achieve their major goals or what should be their major goals in preparing the manpower needed for the development of the country.

On the average, institutions of higher education mainly stressed scientific facts and subject matter at the expense of scientific attitudes and methods of research. They mostly emphasized the theoretical rather than the practical aspects of education. Thus the results were as mentioned earlier: the absence or shortages of trained people in practical and usable skills needed in the country. Also as a result, there was an over supply of graduates who mainly equated their degrees with success in getting white collar jobs rather than serving the needs of the country whatever those needs were.

The question now becomes, how does the educational system deal with such problems? Realistically, we cannot expect the system to solve these problems, for it takes more than one system to solve such problems. But since the system is not "static", we expect it to react to such problems. The remainder of this chapter will be designed to show how the system in general reacts under these and similar conditions. To use Green's words, an attempt will be made to "set the system in motion."[6] Also in the remainder of this chapter, an attempt will be made to derive some predictions or projections as to how the system is going to behave and/or adjust to these conditions.

Generally speaking, a relationship or a correlation between "educational goods" and the distribution of "social goods" has been established in many if not in most societies. Although we sometimes tend to seek knowledge for its own sake without anticipating any material rewards, we certainly tend to do so outside the boundaries of the system

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[6] Ibid., p.90.

and its institutions. Normally, we do not expect anyone to attend schools for an X number of years just for the sake of acquiring knowledge. When we attend schools, we do so in the anticipation of receiving rewards in the form of social goods.

With this in mind, let us imagine a society where everyone in the work-age category has completed an X number of school years or the nth level of the system. The question is, on what basis is this society going to distribute its social goods? More precisely, do we expect any relationship or correlation to exist between "educational goods" and "social goods?"

According to Green, "if there is a level within the system that everyone completes, then completing that level can have no bearing whatever upon any social differences that may subsequently arise within the population."[7] That is not to say that there will be no social differences among individuals who have completed the nth level of the educational system, for social differences might exist or have been known to exist among individuals regardless of their educational attainment but the cause of these differences, he argues, will not be associated or traceable to completing the nth level of the system. Other variables may be the cause of these social differences, i.e. sex, ethnicity, luck and the like. This situation is what Green terms the "law of zero correlation" According to him,

> There is a point in the growth of the system at which there is no longer any correlation between educational attainment and either the distribution of educationally relevant attributes in the population

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[7] Ibid., p. 90.

> or the distribution of non-educational social goods ordinarily associated with educational attainment.[8]

To explain further the "law of zero correlation", Green used the following hypothetical case:

> Let us imagine a society whose educational system has grown at a uniform rate over a period of one-hundred years. By this, I mean that there has been a uniform increase in the proportion of each successive age cohort attaining the nth level of the system. Let us suppose, moreover, that that rate of increase is precisely 10 percent per decade over the one-hundred-year period.[9]

This pattern is represented by a diagonal in figure 3 which Green calls "the uniform growth line". Green argues that point B in the hypothetical growth line is "that point at which the growth of the system will reach zero correlation with respect to the nth level. Point B is the point of zero correlation."[10] To show the strength of correlation through time between "attainment" at the nth level and the "acquisition of non-educational social goods", Green superimposed on the hypothetical growth line a curve to represent the correlation at different points in the growth of the system (see figure 4). He argues that "we know by immediate inference from the tautological law of zero correlation that that curve will reach zero at a point on the horizontal axis opposite point B."[11] This point is point C on the vertical line of figure 4.

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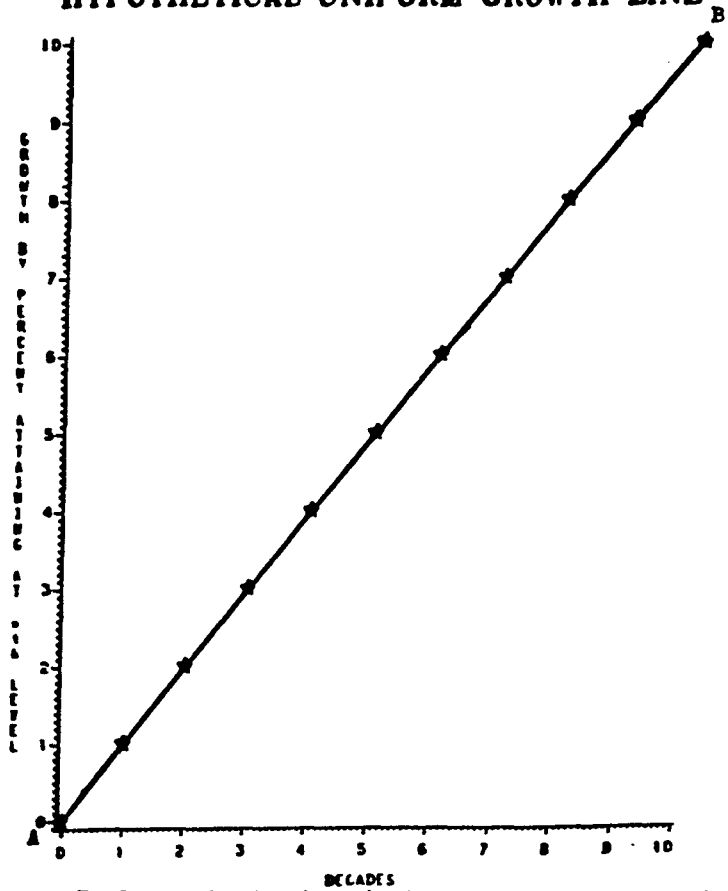
[8] Ibid., p. 91.

[9] Ibid., p. 90.

[10] Ibid., p. 92.

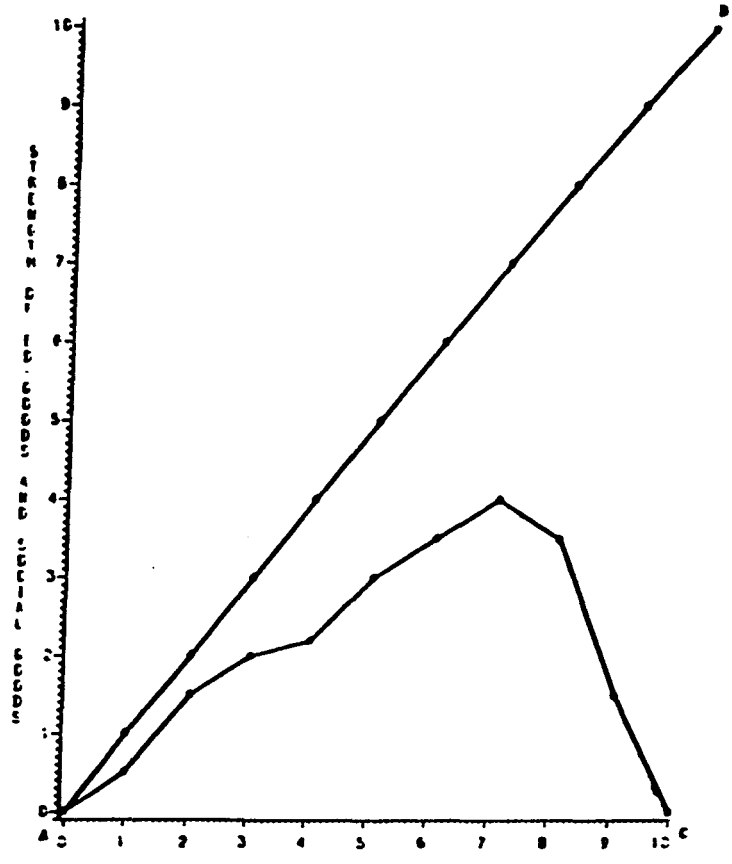
[11] Ibid., p. 92.

FIGURE 3
HYPOTHETICAL UNIFORM GROWTH LINE



Source: Thomas F. Green, Predicting the Behavior of the Educational System (Syracuse, New York, Syracuse University Press, 1980), p. 91

FIGURE 4
UTILITY OF SECOND-ORDER EDUCATIONAL GOODS



Source: Thomas F. Green, Predicting the Behavior of the Educational System (Syracuse, New York, Syracuse University Press, 1980), p. 93.

If point B in the hypothetical growth line is a point of zero correlation, Green argues, then so is point A, and for precisely the same reasons. According to him, "when everyone attains the nth level of the system, there is no correlation between attainment at that level and subsequent possession of any particular social goods. But the same proposition will be true when nobody attains at the nth level."[12]

Thus far Green has reasoned through two propositions or inferences. First, the lack of correlation when everyone attains at the nth level (point B), and second, the lack of correlation when no one attains at the nth level (point A). In other words, Green argues the case of no correlation between educational attainment and the acquisition of social goods at both ends of the hypothetical uniform growth line (figure 3). Green goes on to argue for a third inference. According to him, "the correlation between educational attainment and the acquisition of non-educational social goods rises at some point as the system grows from A to B."[13] Therefore, the direction of any line representing the correlation between educational attainment and social goods rises from point A and descends to point C on the horizontal axis, Green argues (figure 4).

In examining Green's ideas and/or theory, one might question whether any society has reached the point of zero correlation. Before attempting to answer, one might argue that Green derived these propositions or inferences from a totally hypothetical situation. Although there is nothing wrong in doing so, one might argue that in a real situation it

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[12] Ibid., p. 92.

[13] Ibid., p. 92.

might be impossible to make a case for zero correlation at any level of the system and also to generalize the case to include everyone who attained at that level.

According to Green, "it can be doubted whether any society has reached a point of zero correlation at any level as high as, say, the twelfth level of the American system. There are societies that have not reached that point at a level as high as the third grade in the American system."[14] Although Green argues that the level "may be as high as college or as low as first, grade",[15] we normally tend to associate only the higher levels of education with the acquisition of social goods. The question is, can we realistically expect any correlation between, say, the first grade and the acquision of social goods? The point is, even if there is a society where everyone attained the first level of the educational system, we do not expect any correlation between attaining that level and the distribution of social goods, not because that society has reached the zero correlation, but it is more likely because of other variables such as age, for we normally attain the first level at an early age and we do not expect anyone to work at that age.

The point, however, is not the level at which a society might reach the point of zero correlation, but whether a society will ever reach that level. Furthermore, if the point of zero correlation is reachable, then what are the necessary and/or sufficient conditions needed to make such a case? Green himself argues that "the system is not a static

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[14] Ibid., p. 93.

[15] Ibid., p. 93.

thing, it changes through time."[16] If the system is in motion, then one might argue that it will be difficult for it to reach the point of zero correlation. It is most likely that the system will change before reaching that point. Therefore, it is more realistic to say that the system might approach the point of zero correlation but not reach that point.

As mentioned before, according to Green, "if there is a level within the system that everyone completes, then completing that level can have no bearing whatever upon any social differences that may subsequently arise within the population...I shall refer to this proposition as the law of zero correlation."[17] Can we then make the case that it is necessary and/or sufficient for everyone to complete the nth level within the educational system before we can make the case of zero correlation? More precisely, can we make the case of zero correlation at the nth level of the system even though not everyone completed that level?

To illustrate, let us take the case of Jordan. On the one hand, we cannot claim that everyone in Jordan has attained a college or university degree. On the other hand, however, unemployment can be found among individuals attaining such degrees. In other words, it could be argued that the system in Jordan is approaching the point of zero correlation in some programs within such levels. In light of this situation, can we claim that it is not necessary nor sufficient for everyone to complete the nth level within the system before we can establish the case of zero correlation? It is most likely that a point of zero correlation might be

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[16] Ibid., p. 90.

[17] Ibid., pp. 90-91.

approached regardless of the number of individuals completing the nth level within the system.

In view of this, one might argue that the correlation between educational goods and societal goods are simply a case of supply and demand regardless of the levels of education or the number of students completing these levels. Let us imagine a society where the number of jobs available for high school graduates exceeds the number of graduates every year. Let us further imagine that this situation will hold true even when everyone in that society completes that level. Can we then make the case of zero correlation between attaining a high school diploma and the distribution of social goods? It is most likely that we cannot.

Let us now reverse the situation. In society X the number of jobs available for the high school graduates are very limited and only 1,000 graduates can be employed in society X. In this situation, it is most likely that there will be no correlation between attaining a high school diploma and social goods after the first 1,000 jobs have been taken and this situation will exist as long as society X needs only 1,000 graduates. Furthermore, the situation might change as the availability of jobs changes.

Whether it is a case of supply and demand or zero correlation, the important question is, what can we expect to happen as a society reaches or approaches that point? Green argues, that the "law of zero correla-

tion does not stand alone. It has its corollaries."[18]

The first of these "corollaries" according to him is the rule of "transformation from educational attainment to educational achievement." Green argues that:

> As we approach the point of zero correlation at the nth level of the system, then merely having a diploma or a certificate at that level will no longer discriminate between individuals. It will become important to discriminate between diplomas, certificates, and programs. In a society where everyone earns a high school diploma, having one no longer bestows any particular advantages, but having one from this or that school or from this or that program may still represent a mark of distinction and may, therefore, bestow considerable advantages. Thus attention will shift from the level of attainment to the quality of achievement."[19]

Green argues that beside allocating social goods on the basis of different ways of attaining the nth level, a society might choose to "allocate non-educational social goods on the basis of attainment at the level of n+1 or beyond where, presumably, the approach of zero correlation is more remote. Thus, we would expect the educational prerequisites for jobs to be upgraded and the system to press for higher levels of universal attainment."[20]

The second corollary of zero correlation is the "rule of transforming utility."[21] As mentioned earlier, Green argues that "under conditions of zero correlation, second order educational benefits have no instrumental value for the allocation of social goods...their remaining, and still

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[18] Ibid., p. 94.

[19] Ibid., p. 94.

[20] Ibid., p. 95.

[21] Ibid., p. 95.

secure, value will become their instrumental worth in securing access to subsequent levels of the system."[22]

In examining these points, one might argue that although the quality of educational achievement tends to enhance its own value, the question is how can we make the case for a society in which different schools and/or programs are not available? Furthermore, what if a society believes in providing for equal educational opportunities for all of its students and/or schools? In light of this, and assuming that that society has reached the point of zero correlation at the nth level of its educational system, the question becomes, how can we expect this society to discriminate between diplomas, certificates, and programs if the educational values of these "second-order educational benefits" are assumed to be equal?

The third corollary of zero correlation is the principle of "shifting benefits and liabilities."[23] According to Green "as the social value of second-order benefits declines for those who receive them, then the social liabilities suffered by any individual as a consequence of not securing them will increase."[24] To illustrate his point, Green used the example of school drop-outs. He argues that when a society has fewer drop-outs, i.e. more people staying in schools, the drop-out problem becomes more serious than if when the society has many drop- outs.[25]

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[22] Ibid., p. 96.

[23] Ibid., p. 96.

[24] Ibid., p. 96.

[25] Ibid., p. 90.

Although we normally tend to consider a high rate of drop-outs as a serious problem, Green argues that "the reason we have a drop-out problem is not that we have too many drop-outs, but that we have too few."[26] Green went on to argue that "when attaining at the nth level of the system is no longer viewed as something worth doing for the sake of some goods then the value of educational attainment is viewed instead as something necessary to endure in order to avoid certain evils."[27] This, according to Green, "is a case where supply creates demand. The presence of many high school graduates creates the social compulsion for the rest to secure one."[28]

In applying Green's ideas to the case of Jordan, one might argue that although the case of zero correlation might not be established, some of the programs or fields of specializations are certainly approaching that point. Oddly enough though, the system seems to be approaching the point of zero correlation at its higher levels rather than its lower ones.

Indicators about the supply and demand at different educational levels in Jordan are showing that the country has a surplus or an over supply of qualified personnel in some of the fields of specializations i.e humanities and social sciences in general at college and university levels. At the same time, the Jordanian labor market is showing a great need for qualified personnel in other fields of specializations i.e vocational/technical, and middle-level management personnel at the same

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[26] Ibid., p. 99.

[27] Ibid., p. 101.

[28] Ibid., p. 101.

level.

Two points are worth noting here. The first arises from the fact that the system is approaching the point of zero correlation at its higher levels rather than its lower ones. The second, however, arises from the fact that only parts or certain fields of specializations or programs at these levels are approaching that point.

In discussing these points, one might argue that they are expected to hold true as the supply and demand factors operate in the job market. Generally when the supply exceeds the demand at any level of attainment in the system, that level is expected to reach zero correlation regardless of the position of that level in the educational ladder. It can be low, high, or somewhere in between for there is no law (that I know of) which states that the lower levels of the system might or should reach the zero correlation before the higher ones. The same can be said about the different programs in the system either within a particular level or between levels of the system.

A word of caution, however, is necessary. Although it might seem at least on the surface that the system in Jordan is approaching the point of zero correlation at its higher levels rather than its lower ones, this might not be necessarily true. It could be argued that this observation is based on the number of people applying or seeking jobs in the job market and not necessarily on true supply and demand factors. If the number of people seeking jobs are mostly from those attaining at the higher levels rather than the lower ones i.e. more unemployment among

people attaining at the higher levels (as it is the case in Jordan), this does not necessarily mean that those attaining at the lower levels have secured jobs and therefore are not in the market for employment. It might be because they do not anticipate employment, they are not ready to get one, or merely society has no jobs available for them. The last reason, however, is more reasonable. As the supply exceeds the demand, it is most likely that the system will employ those with the highest attainments and discriminate against those with the lower ones.

Dr. Khaled El-Shuraydeh from the Council of Higher Education in Jordan completed a study on "Indicators of the Employment Process in Jordan." A questionnaire was designed to collect information about job applicants and those who gained employment. The information sought included degrees, fields of specializations, and sex of applicant. The results of this study revealed that there is a surplus in the supply of qualified manpower in some of the fields of specialization but that other fields in the Jordanian labor market are in need of qualified personnel. According to El-Shuraydeh labor shortages exist in the following fields:

> At the Ph.D level: banking and finance, private law, pharmaceutical chemistry, journalism and information, nutrition, horticulture, agricultural economics, plant protection, soil and irrigation, archaeology, english language, religion, sociology, humanities, civil engineering, industrial engineering, architecture, cartography and photogramatory, pediatrics, internal medicine, anaesthetics, computer science, demography, and physical education.
> At the Master's level: banking and finance, aviation law, education, plant protection, urban planning, architecture, nursing, physiotherapy, cartography and photogramatory, sociology, and health planning.
> At the Post-Graduate Diploma level: geology, journalism and information, and library science and documentation.
> At the Bachelor's level: production engineer, plant production, urban planning, systems engineering and control, surveying, dentistry, pharmacy, computer sciences, and music.

> At the College level: typing and office work, shairi'a studies, computer operators, petroleum refinery technicians, cartography and photogramatory, production and machinery, medical records and staistics, and airplane maintenance.[29]

Although the scope of this study was limited to the higher levels of the system (beyond the high school diploma), the results revealed that the system did not reach the point of zero correlation at the levels studied i.e at the Ph.D, Master, Post-Graduate diploma, Bachelor, and College levels. The results revealed labor shortages at all these levels. However, the results also revealed that there is an over supply of qualified manpower in some of the fields of specialization at these levels. In short, the system has not reached or approached the point of zero correlation at all programs or fields of specialization at these levels, but only at some of the programs or fields of specialization at all the levels surveyed by this study. The study also revealed a need for trained personnel attaining at the levels beyond college and university levels i.e. beyond were the system is expected to reach the point of zero correlation.

In view of what has been discussed, the question becomes, what can we expect to happen in Jordan? More precisely, how can we expect the educational system in Jordan to react under these conditions?

Based on the data represented in chapter 3, figures 5, 6, and 7 are developed to indicate trends of the educational system in Jordan for the past three decades. Also the figures show the predictions or projections

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[29] "Indicators of the Employment Process in Jordan," Jordan Times, December 10, 1984. p. 3.

of the system's trends for the near future. These projections are represented by the dotted lines and they are the responsibility of the author alone.

Figure 5 represents the enrollment trends at the lower levels of the system, i.e. compulsory and secondary levels for the last three decades. Enrollment at these levels is expected to increase significantly over the next few years. Free education and the limited number of jobs available for young people might convince many of them not just to enroll in schools but to stay longer there.

Also the principles of transforming utility and shifting benefits and liabilities are expected to operate and probably convince many people to enroll and/or complete these levels i.e. obtaining a high school diploma. As these principles operate, people might be persuaded to attain these levels to permit them access to the next level in the system, and/or to avoid certain evils which according to Green might result from not attaining these levels.

Increase in enrollment can also be projected for vocational and technical schools and for those programs or fields of specialization at the college and university levels needed in the country. Figures 6 and 7 depict these projections.

These projections are based on supply and demand factors. It is expected that the system will operate in a way as to prevent serious supply-demand imbalances in the near future. Thus demands factors are expected to influence supply activities in a way that they might be geared towards fulfilling these demands.

Figure 5
Year by No. of Students in 1-12 Grades

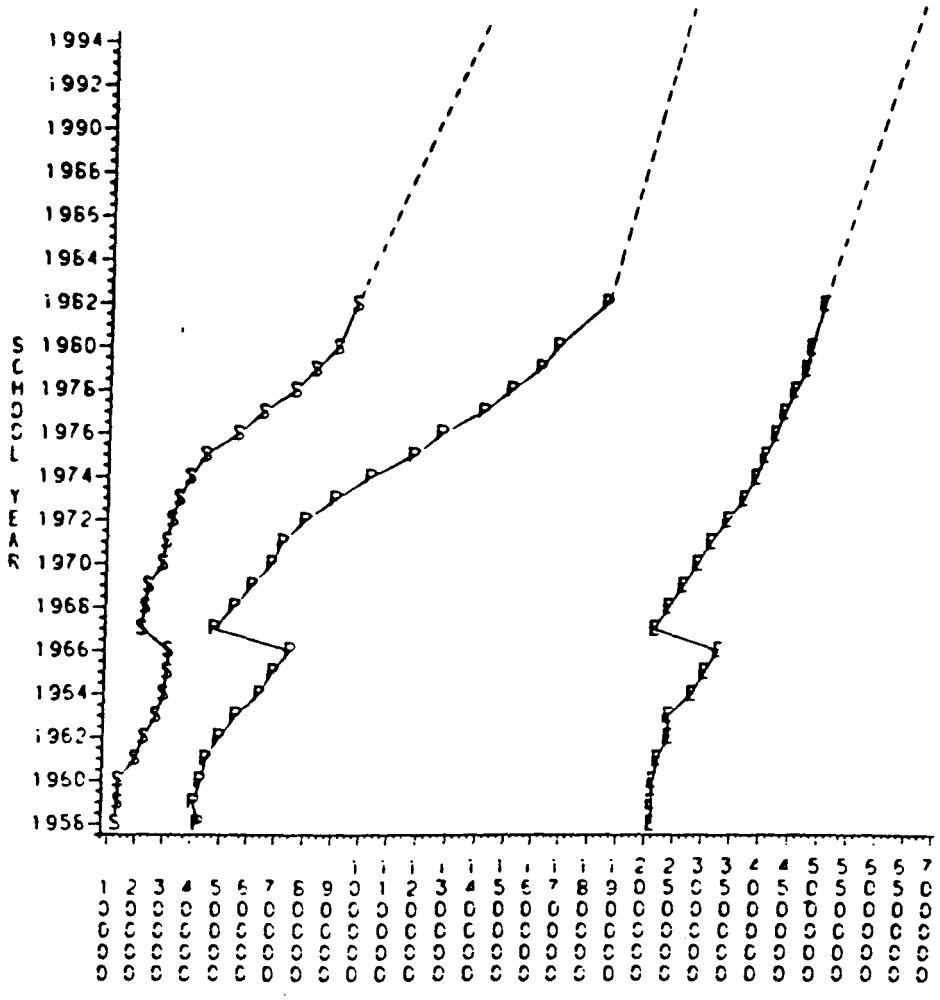
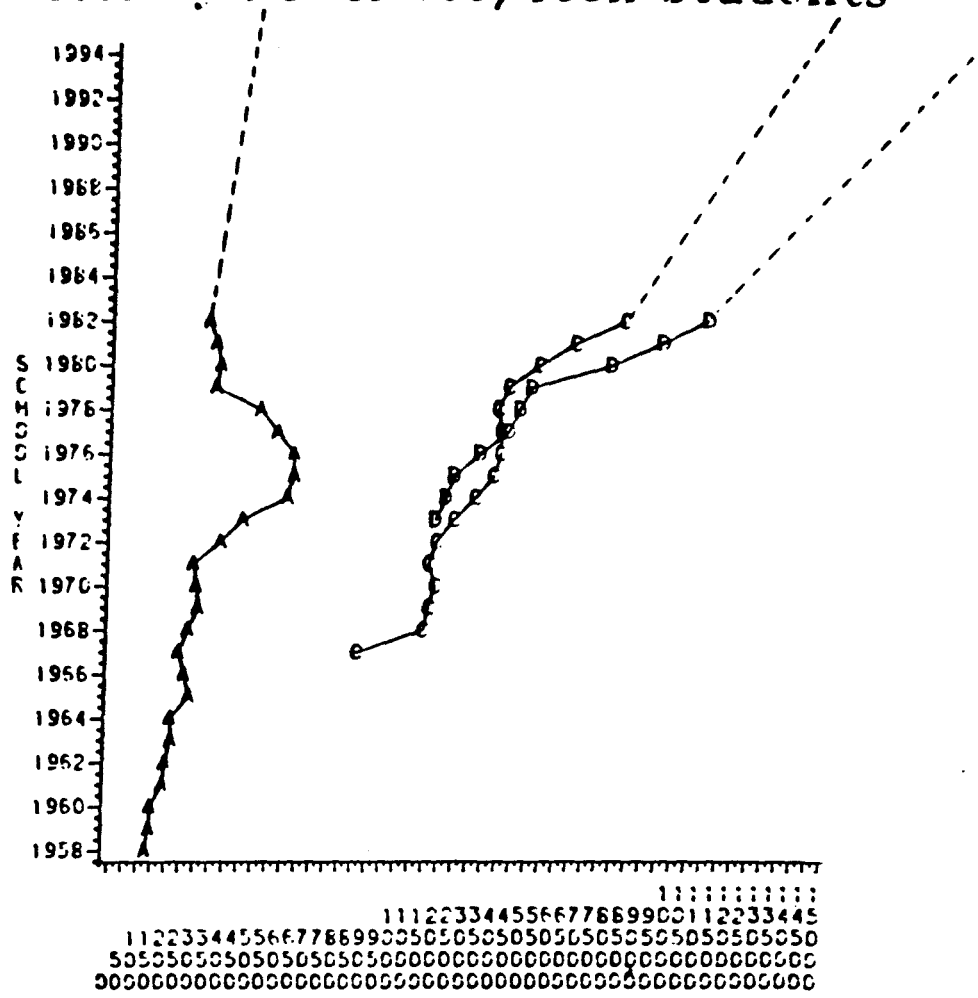


Figure 6
Year by No. of Voc/Tech Students



AAAAA=Agricultural Students
CCCCC=Commercial Students
DDDDD=Industrial Students

Figure 7
Year by No. of Colleges and Students

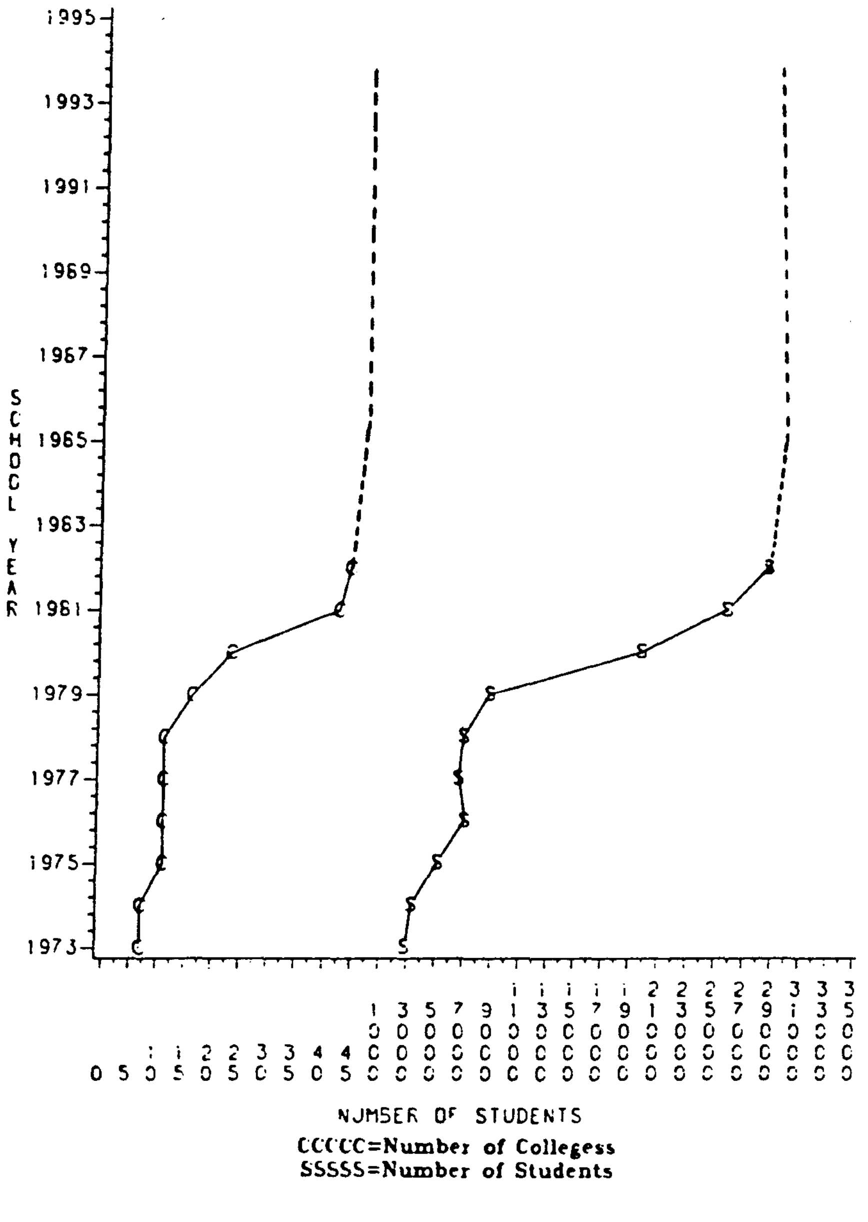
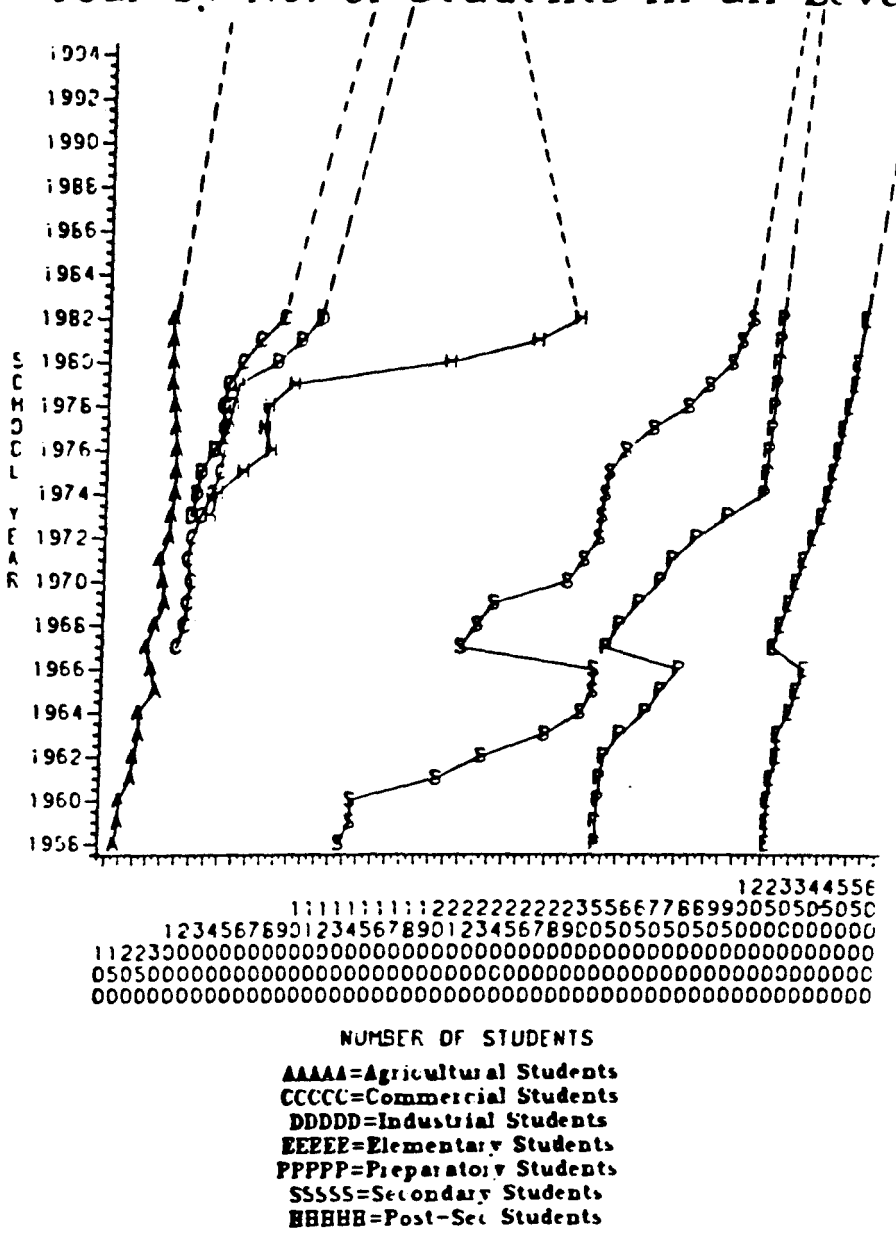


Figure 8

Year by No. of Students in all Levels



In light of this, it is then expected that the rule of transformation from educational attainment to educational achievement will apply. It will apply in a way that the system might discriminate between not just diplomas and certificates but more importantly between programs and fields of specialization. Therefore, the system is expected to discriminate for and against such programs according to the supply and demand and/or the magnitude and availability of these programs.

Also as this rule applies, social goods are expected to be allocated on the basis of attaining beyond the university college and university levels or beyond where the point of zero correlation is expected to be approached. This is based on the fact that the country is in need of such attainments. As mentioned before, the results of El-Shuraydeh's study show that the country is in need of programs at the Master's level and for most programs at the Ph.D level.

From what has been discussed, it might seem at least on the surface, that attainment in the system might increase when in fact it will decrease. According to Green,

> we have a reason for believing that as the system approaches zero correlation, marginal gains in its growth will lessen and perhaps vanish altogether. The first is the transformation from attainment to achievement will slow the marginal growth of attainment. The second is that as the incentives for attainment shift from the persuit of a good to the avoidance of a disaster, then the quality of the perceived reasons for attainment will further decline.[30]

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[30] Ibid., p. 104.

Thus instead of a vertical increase, it is expected that the system might differentiate and/or diversify its programs and/or institutions, thus placing more emphasis on those in need and less emphasis on those where over supply exist.

Summary

Reasons and/or causes for the educational expansion have been discussed and analyzed. It has been shown that demographic changes, social beliefs, and economic factors are the major causes or reasons for the educational expansion in Jordan.

From the discussion it became obvious that the educational expansion in Jordan has suffered from the lack of long term planning. The system has failed to establish a balance between the supply of graduates and the demand of the Jordanian labor market. Thus the results are shortages of trained manpower in some areas and an over supply in others.

Finally, a series of graphs has been developed to indicate educational trends in Jordan for the last three decades. These graphs also indicate the author predictions or projections of the educational system for the near future.

CHAPTER V

SUMMARY, CONCLUSIONS, AND POLICY RECOMMENDATIONS

The purpose of this study is to document and evaluate the expansion and the development of the educational system in Jordan between the period of 1950 to 1980. This period was chosen because it marked a new era in the history of the Jordanian society in general and in the development of its educational system in particular. King Hussein came to power in 1952 and the new era began. Together with an energetic people, they transformed Jordan from a highly illiterate nation to one of the best educated in the Middle East.

The information and the statistical data presented throughout the study can be described as factual. Although I did not collect the data myself, I took special care to check its validity by making sure that it was reported by more than one reliable source. I relied heavily on materials obtained and/or issued by the following: Jordan ministry of education and other government agencies, international organizations such as UNESCO and UNRWA, published books and articles, unpublished papers, government documents, and finally personal observations.

Based on this data, I made an attempt to describe and evaluate the expansion of the educational system in Jordan. Also an attempt will be made at the end of this chapter to present some policy recommendations

and/or suggestions for the improvement of the educational process in Jordan.

The educational system of any country does not operate in a vacuum. It is related to and/or the product of its environment. For this reason this study would be incomplete without any knowledge of the social, economic, and political conditions of the country (see chapter 1).

Chapter I presents an overview of the country and the people. Jordan is a constitutional, hereditary monarchy with a parliamentary form of government. It is a very small agricultural country with a total area of approximately 37,000 square miles and an estimated population of 2.5 million. Jordanian society can be divided into four groups: nomadic bedouins, villagers, refugees of the camps, and urban dwellers. Also different religious and ethnic minorities do exist in Jordan. Those are: Christians, Circassians, and Shishani. The family is the most important social unit in Jordan. It is at the core of Jordanian life. Prior to urbanization, education, and economic independence the extended family was the dominant factor in Jordan. Today the influence of the extended family has waned. It has been gradualy repllaced by the nuclear family.

Chapter II discusses the structure of the educational system. The present system of education in Jordan had its beginning following the merger of the East (Transjordan) and West (Palestine) Banks in 1950. The Ministry of Education set to unify the two systems of education, one in Palestine and the other in Transjordan.

Education in Jordan is free, compulsory (elementary and preparatory), and the duty of the state. The education ladder is similar to the one in the United States. It consists of 6 years of elementary schools, 3 years of preparatory schools, and a nationwide examination is given at the end of this stage. Those who pass usually continue their education either in secondary schools or in the various colleges such as industrial, agricultural, or commercial, depending on their grades in the Public Examination. The final stage is a 3 year secondary school which also ends with a national secondary exam. Students who pass the exam receive their high-school diplomas which entitles them to pursue a higher education in the universities and colleges in Jordan and abroad.

The Ministry of Education has an overall control of education. It exercises its power through the system of financing as well as inspecting. Under this system the power of policy making, curriculum development, textbook production, examinations, teacher certification, recruitment, promotion and termination of staff is given to the central government which exercises this power through a national Ministry of Education. Thus the educational system in Jordan is considered to be a centralized system of education. It has also been argued that some decentralization efforts have been accomplished to a limited extent. The central office of the Ministry of Education is divided into fifteen educational districts. Each district has a director who acts as the educational and administrative head of the district and can make some educational decisions in his district without consulting the Ministry of Education. In other words, the educational system in Jordan is neither

completely centralized nor completely decentralized. It has a mixed feature of centralization and decentralization.

The enrollment ratios in Jordan are among the highest in the area. It also compares very favorably with ratios in most of the countries around the world. According to the educational statistics of 1971/72, 95% of children in the (6-11) age group were attending elementary schools, 70% in the (12-14) age group were attending preparatory schools, and 35% in the (15-17) age group were attending secondary schools. At the higher level of education the enrollment ratio for the (18-23) age group was estimated at 18%.[1]

Realizing the importance of education, the Ministry of Education had laid down the following main objectives for the 1980's:

1. To achieve by 1980, the enrolling in elementary schools of all children in the (6-11) age group.

2. To achieve more educational opportunities to enable, by 1980, an 80% participation rate for children in the (12-14) age group.

3. To diversify education at the secondary level and to increase the number of students enrolled in vocational schools.

4. To encourage girls to remain more years in the elementary and preparatory schools, since the participation rate for girls is less than that of boys.[2]

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[1] Najati Al-Bukhari, Education in Jordan, (Ministry of Culture and Information, Amman), p. 6.

[2] Ibid., p. 6.

On the average, it could be argued that these objectives have been fulfilled in the 1982/83 school year (see table 3). Educational statistics for this year shows 90.8%, 88.8%, 67.9%, and 21.1% enrollment ratios for the elementary, preparatory, secondary, and higher education respectively.

Building on Green's theory on the behavior of the educational system, chapter III describe the expansion of the educational system in Jordan. In describing the expansion of the system it became obvious that the system did indeed expand and it is still expanding very rapidly over the years. It became equally obvious that the system expanded in each and every way possible. Keeping in mind the eight "modes of expansion" that Green identified, it could be argued that all these "modes of growth" can be clearly seen and/or reflected in the way the educational system in Jordan expanded.

Although all eight "modes of growth" were and are reflected in the system's expansion, it became evident that modes number one and three dominated the way the system expanded. It was clearly shown that the educational system expanded to accomodate the large number of school-age children who evidently wanted to be educated (mode #1). It was also shown that the system expanded by adding levels at the top and the bottom of the educational ladder (mode #3).

Although enrollment in all levels of education has been rapidly increasing over the years, it has been shown that enrollment in vocational and technical education is very low as compared to the general

(academic) education. This low enrollment can be attributed to at least three main factors: societal, educational, and economic.

It is argued that Jordanians in general are academicly oriented people. Despite the fact that Islam respects work and encourages people to acquire skills and work with their hands, Jordanians attach some kind of "social stigma" to this type of education. This "social stigma" combined with a student's low esteem and low financial rewards which is usually attached to manual labor, played and is still playing a major role in detering students from vocational and technical education. To these factors one might add the fact of the lack of resources and the shortages of a well trained personnel needed to operate these schools.

Causes and major consequences of the system's expansion are discussed in chapter IV. It has been shown that demographic changes, social beliefs, and economic factors are the major causes and/or reasons for the educational expansion in Jordan.

From the discussion it became obvious that the educational expansion in Jordan has suffered from the lack of long term planning. The system has failed to establish a balance between the supply of graduates and the demand of the Jordanian labor market. Thus the results are shortages of trained manpower in some areas and an over supply in others.

A series of graphs has been developed to indicate educational trends in Jordan for the last three decades. These graphs also indicate the author predictions or projections of the educational system for the near future. Based on the data and the analysis, enrollment at the compulsory

and secondary levels is expected to increase significantly over the next few years. Free education and the limited number of jobs available for young people might convince many of them not just to enroll in schools but to stay longer their. Increase in enrollment can also be projected for vocational and technical schools and for those programs or fields of specialization at the college and university levels needed in the country.

The practice of educational planning in Jordan has been mainly a quantitative one. Concentration on numbers and not quality[3] has led to a surplus of educated personnel in some areas and shortage in others. Although in most developing countries it is usually the educational system that cannot keep up with the demands of other sectors, this is not the case in Jordan. On the average it could be argued that the educational sector has been developing more rapidly than any other sectors in the country which led to an over-production of educated personnel in relation to the absorption capacity of other sectors.

The objective then is to establish an educational policy or reform the existing one to create a closer relationship between the supply of the educational system and the demand of the country. This point is of great importance in educational policy making in Jordan. In other words, since the problem of numbers has been mastered, an effort should be launched into the area of quality and/or suitability of the needs of the country.

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[3] This does not necesarily mean "degree of excellence" but degree of suitability to the needs of the country.

It is beyond the scope and the limitations of this study to put together a comprehensive educational policy or a plan for the system in Jordan. This is despite the fact that such a policy or reform is much needed in the country. In the absence of complete knowledge of all sectors of the Jordanian society an educational policy will certainly be useless. It could be argued that sound and effective educational planning for Jordan and probably elsewere depends very much on the reliability, validity, and comprehensiveness of not only the educational data but on the data available for all sectors of that society.

Education cannot be described in isolation and/or independently of all sectors in the society. It is more likely that education has an effect and is effected by the political, economic, social, and cultural factors of the society sponsoring that education. In this instance, it could be argued that the best policy for society A might not be necessarily the best policy for society B. It is more likely that each society has its unique conditions and therefore it requires a unique policy to suite its needs. The case of Jordan is certainly a unique case. As mentioned before, the educational system in Jordan has been and still is affected by not just the supply and demand in Jordanian labor market but also in the neighboring Arab states.

Thus, educational planners in Jordan might be guided by the following recommendations:

1) All indicators show that Jordan is in great need for trained manpower in the vocational and technical areas. From the data presented in this study, it can be seen that the numbers of vocational and techni-

cal students lag behind those attending general academic schools. It has been argued that it is either by design or by default the educational system in Jordan encourages students to attend general academic schools and avoid the vocational and technical ones. It is safe to say that this type of education attract only the drop-outs of the academic schools. In light of this the following steps should be taken:

A) The government and the educators in Jordan have been trying for years to increase enrollment in vocational and technical education. In my opinion, for any change to occur it has to come from the top-down and not from the bottom-up. In other words, it is not enough to force students to enroll in vocational and technical education for they might drop-out as has been the case in Jordan for many years. It is necessary for the educational system to encourage rather than force students to enroll in vocational and technical schools. One way to do that could be by emphasizing the positive aspects and the values of this type of education not just to the students but also to society as a whole.

B) Changing and/or revising the curriculum at the vocational and technical schools has for a long time been needed in Jordan. As a matter of fact, curriculum could be the major cause of the low enrollment in these schools. On the average, it could be argued that these schools are falling short of providing adequate training for their students.

C) Since vocational and technical personnel are very much needed in Jordan, my projection is that in the near future the financial values of vocational and technical education will outweigh the general academic one. As the educational system produces more graduates in the academic fields and less in the vocational and technical ones, the value of the

first will certainly decrease and the value of the second will increase. Therefore, appropriate measures should be taken to increase the number of schools that offer vocational and technical education to help accomodate the projected increase in the number of students who might be convinced to major in these fields.

2) Because of the over supply of some fields of specialization and shortages in others, some appropriate measures should be taken towards the diversification of programs and/or institutions. Thus, more emphasis should be placed on those in need, and less emphasis on those where over supply exists. In this instance, suggesting the hiring of counselors in schools and higher institutions to help direct the students might not be a bad idea.

3) It could be argued that the quality of the schools depends primarily on the quality of their teachers. Therefore the elimination of educational shortcomings might depend largely on the ability and training of teachers. Teachers' training in particular and teachers' situations in general could stand some improvement in Jordan. It is safe to argue that teaching does not attract the best qualified personnel in the country; some teachers are holding teaching positions not because they want to teach but because there is nothing else available.

It is one thing to propose a policy, yet it is another thing to implement that policy. As mentioned earlier, Jordan is a country with very limited resources and the lack of resources might be the most difficult problem facing educational reforms in Jordan. Although I have neither the authority nor the power to suggest solutions to this problem

(this should be left to the authorities in Jordan), the following suggestions might be considered:

1) Since the private sector in Jordan is very much benefiting from the knowledge and the know how of the products of the educational system, i.e. the graduates of the system, I feel that it should help finance some of the educational projects and/or educational reforms in Jordan.

2) There are an estimated number of more than 400,000 Jordanians working outside Jordan (325,000 are working in the oil-producing Arab countries alone) who are mostly the product of the educational system in Jordan. Therefore, imposing some kind of educational tax on those people might generate a large some of revenues which could be invested in the educational reforms in Jordan.

In conclusion, this study has accomplished what it set out to accomplish, i.e. it described, analyzed, and evaluated the educational expansion in Jordan. This kind of study is very much needed in Jordan. For many years the educational system in Jordan has been expanding and/or developing very rapidly. Educational accomplishments in Jordan can be regarded as one of the best in the Middle East area. Due to these educational accomplishments, it has been asserted that "Jordan's main industry is education," and that is mainly what made the Jordan of today.

Despite these educational gains and/or accomplishments, it has been argued in this study that educational planners in Jordan has concentrated on numbers and not quality in the process of the educational

expansion. Therefore, some appropriate steps should be taken to enhance the quality of education and make it suitable to the needs of the Jordanian society. The balance of supplies and forseen demands is crucial in Jordan. Otherwise we have to rely on the knowlege and the know how of other people and this could cost Jordan plenty.

Educational planners in general might not be concerned primarily with the needs of the labor market, but it could be argued that it is the educational system which usually provides the largest supply of employees in the labor market. Also, it is in the educational planner's interest that the graduate of the system be able to earn his/her living in the society.

It is my sincere hope that I served my country by giving a comprehensive and clear picture of the educational situation that exists in the country. More importantly, I hope that this study has paved the way for further research on the area of educational planning and reforms in Jordan.

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