

The Jordanian Countryside as a Corridor for Population Movements and Trade

Jordan, in its present boundaries, carried the name Transjordan, for many years, until the 25th May 1946. The modern movement towards independence began in March 1921 when Prince Abdullah Ibn Al-Hussein arrived by train to 'Ammān from Ma'ān and was proclaimed prince of the land. Later, in 1925, the King of Ḥijāz ceded to him the districts of Ma'ān and 'Aqaba and the country acquired its present borders. Although the area has been a corridor all through known history it is now certain that the last century witnessed the most significant changes in population. The changes brought about by these movements have not settled yet and our generation, and that of our children, may be exposed to unexpected and serious events, during the coming decade or two.

Under the circumstances, it will be useful to define, in chronological order, the different events and factors that have affected population. The list I have chosen for this purpose is the TABLE 1 that has been compiled by the "Institute voor Aardewerktechnologie in Leiden" (Homés-Fredericq and Franken 1986: 30).

The three first periods namely the Paleolithic until 17000BC, the Epipaleolithic 17000-8500BC and the Pre-Pottery Neolithic 8500-5500BC are too early to have any important bearing on the subject and have therefore not been included in the study. The following periods were reviewed and population movements that took place during their time were mentioned in the detail that time allows for a work of this nature.

The Pottery Neolithic 5500-4500BC

Witnessed settlement in the 'Ayn Ghazāl area north of 'Ammān and confirmed the close relations that seem to have developed between human groups in the 'Ammān Plateau and the Jordan Valley depres-

TABLE 1. The Chronology.

Pottery Neolithic	5500-4500
Chalcolithic	4500-3200
Early Bronze (EB)	3200-2250
Intermediate Period (EB/MB)	2250-1900
Middle Bronze (MB)	1900-1550
Late Bronze (LB)	1500-1200
Iron Age (I and II A-C)	1200-539
Persian Period	539-331
Hellenistic Period	331-63
Nabatean Period	312BC-106AD
Roman Period	63BC /106AD-324AD
Byzantine Period	324-636
Islamic Period	636-1516
Ottoman Period	1516-1918
British Mandate	1918-1946
Royal Hashemite Kingdom	1946-

sion near Jericho. Archaeological remains at 'Ayn Ghazāl represent adaptation through joining agriculturalists and pastoralists in one large Jordanian Neolithic town, that continued as a living unit for over 2000 years (Simmons 1995: 119).

The Chalcolithic 4500-3200BC

This period witnessed the development of Jāwā in the al-Ḥarra region in the north of Transjordan. Its archaeological rise to prominence in the Nineteen seventies seemed unique in terms of its elaborate hydraulic system, and massive fortifications in a most inhospitable area. Writing in 1980 Helms was confident that "The establishment of the town and its essential life-support systems, took place during a time of well-attested population movements

throughout the greater region and might be seen as a part of this pattern. Thus arises the hypothesis that the technocrats of late fourth-millennium Jāwā may easily have emigrated yet another time and entered the “Land of Milk and Honey” along with other migrants and been the source of the new urban idea in the land that became known as Canaan” (Helms 1981: 9, 11).

The Bronze Age 3200BC-1550BC

Was the period when the Semites made their appearance in Syria starting with the Sumerians, followed by the Akkadians and the Amorites. In the Hyksos period the area started to see the development of city states and it was towards the end of this period around 1500BC that the Egyptian waves of influence started to make themselves felt. A wave of Hittite influence (Lehmann 1977: 303-306) followed in around 1350BC which also extended over few hundred years. The importance of the early Transjordanian states of Edom, Moab and Ammon started to appear immediately afterwards and it is most probable that settlers who founded these states were originally from among the indigenous local nomads who had previously entered the region and settled in it (Chang 2002: 353). The coming and going of all these groups and different armies was in fact another extended period of time when the Jordanian Corridor was being traversed by many groups in different directions.

The Iron Age 1200-539BC

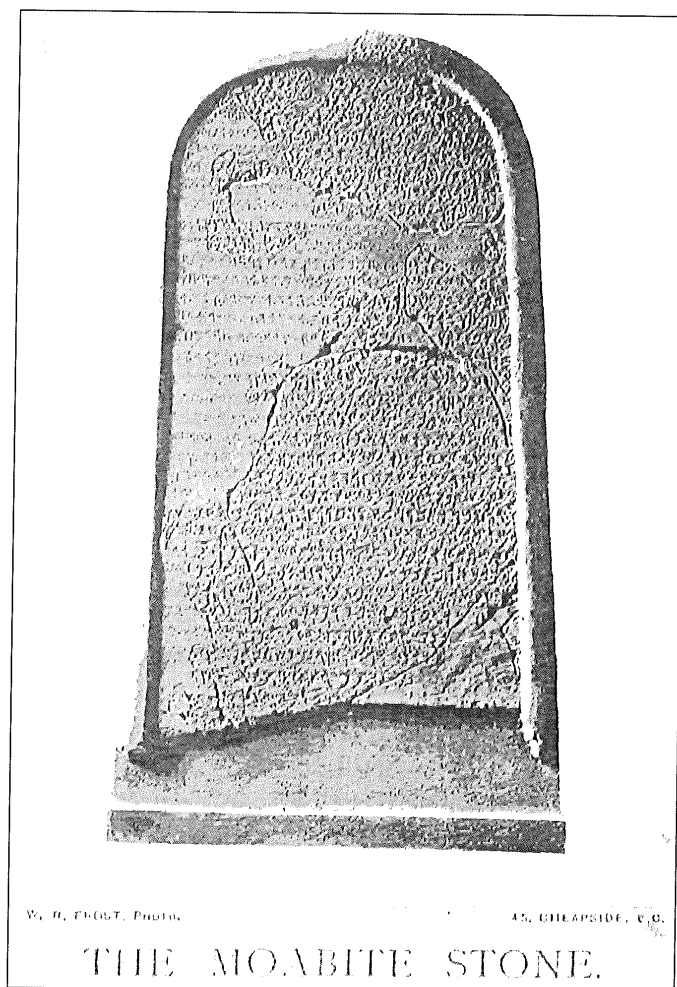
This age was so important in the history of our area since it has left its mark on the states as well as the people who dwelled in it, until our present times. It saw the coming of the Israelite tribal movement, which continues to affect the whole area some 3200 years afterwards. The wars that developed between the newcomers and the indigenous population, in the states of Edom, Moab, Ammon and Cann’an (in Palestine), are recorded by the Israelites in the Old Testament. Another source of a different nature, which greatly aids to reconstruct the history of the area, is the Moabite stone (also referred to as the Mesha’ stele). Discovered in Dhibān in 1868, this important relic puts on record the endless fight for land and thereby the continuous movement of people. Figure 1 is a photo of the stone and Figure 2 is a translation of its text in English, as received

through the courtesy of the Palestine Exploration Fund in London, will give the reader a good idea not only about the local wars, but also about the dire need for water even these early days¹.

The period also witnessed the many movements of the armies of the Assyrians and the Neo-Babylonians, every time a campaign occurred there was a forced or voluntary movement of population, including the exile of the Israelites from Palestine to Babylon. People saw the end of the Neo-Babylonian supremacy when Cyrus of Persia succeeded in invading the Babylonian Empire and conquering it, while its King Nabonidus (555-539BC) was living with his whole court in the oasis of Tayma in northern Hijāz, a thousand kilometres from his capital.

The Persian Period 539-331BC

This was the first invasion of the Persians in the area and the period was marked with continuous strife and wars in the north between them and the Mace-



1. Mesha’ stele.

¹ The Moabite Stone Rev. W. Pakenham Walsh George Herbert

The Translation of the Inscription is as follows:—

"I, Mesha, am the son of Chemosh-Gad, king of Moab, the Dilonite. My father reigned over Moab thirty years, and I reigned after my father. And I erected this stone to Chemosh at Kirkha, a (stone of) salvation, for he saved me from all despoilers, and made me see my desire upon all my enemies, even upon Omri, king of Israel. Now they afflicted Moab many days, for Chemosh was angry with his land. His son succeeded him; and he also said, I will afflict Moab. In my days (Chemosh) said, (Let us go) and I will see my desire on him and his house, and I will destroy Israel with an everlasting destruction. Now Omri took the land of Medeba, and (the enemy) occupied it in (his) days and in the days of his son, forty years. And Chemosh (had mercy) on it in my days; and I fortified Baal-Meon, and made therein the tank, and I fortified Kiriathaim. For the men of Gad dwelt in the land of (Atar)oth from of old, and the king (of) Israel fortified for himself Ataroth; and I assaulted the wall and captured it, and killed all the warriors of the wall for the well-pleasing of Chemosh and Moab; and I removed from it all the spoil, and (offered) it before Chemosh in Kirjath; and I placed therein the men of Siran and the men of Mochrath. And Chemosh said to me, Go take Nebo against Israel. (And I) went in the night, and I fought against it from the break of dawn till noon, and I took it and slew in all seven thousand (men, but I did not kill) the women (and) maidens, for (I) devoted them to Ashtar-Chemosh; and I took from it the vessels of Yahveh, and offered them before Chemosh. And the king of Israel fortified Jahaz and occupied it, when he made war against me; and Chemosh drove him out before (me, and) I took from Moab two hundred men, all its poor, and placed them in Jahaz, and took it to annex it to Dibon. I built Kirkha, the wall of the forest, and the wall of the city, and I built the gates thereof, and I built the towers thereof, and I built the palace, and I made the prisons for the criminals within the walls. And there was no cistern in the wall at Kirkha, and I said to all the people, Make for yourselves, every man, a cistern in his house. And I dug the ditch for Kirkha by means of the (captive) men of Israel. I built Aroer, and I made the road across the Arnon. I built Beth-Bamoth, for it was destroyed; I built Bezer, for it was cut (down) by the armed men of Dibon, for all Dibon was now loyal; and I reigned from Bikran, which I added to my land, and I built (Beth-Gamul) and Beth-Diblathaim and Beth-Baal-Meon, and I placed there the poor (people) of the land. And as to Horonaim, (the men of Edom) dwelt therein (from of old). And Chemosh said to me, Go down, make war against Horonaim and take (it). And I assaulted it, and I took it, and Chemosh (restored it) in my days. Wherefore I made year and I"

2. Translation of Mesha's stele text in English.

donians and Greeks. Their advance westward was checked after the naval defeat at Salamis (480BC) and battle at Plataea (479BC). Nevertheless they remained as overlords until they were defeated by Alexander the great in 331BC when the period of large population movements was to follow for one thousand long years.

The Hellenistic Period 312BC-106AD

The area in this period witnessed, in the northern part of the country, a most important population movement from the north. Large numbers of Macedonians, Greeks and Europeans from the Balkans and central Europe, came to the East in systematic waves of organised settlement. They started with veterans of Alexander's victorious armies in places like Jarash, which name may have been derived from the Greek word Yeresi meaning "The retired". On the other hand, it is certain that Jarash is an older word, having been used for a site in Yemen, evidently a few hundred years older. Together with Jarash other settlement centres were occupied e.g. Philadelphia, Pella, Gadara, Capitolias, Abila and Dion. Within a few decades most of the Decapolis cities were established along with the settlers around them (Miller 1993: 410). It is unfortunate that there were no registers of people living in these settlements, but a conservative study leads one to assume that the figure for those of European descent in both the cities and the countryside exceeded half a million people. The indigenous population could have been a similar number.

The drive for settlement by the Greeks, Romans and other Europeans was outstanding in terms of space and time. It spread eastwards to the boundaries of Armenia and southwards to the boundaries of the Hijāz. It lasted for nearly one thousand long years. Its influence was only removed by the arrival of the Arab Armies from Medina. The signing of the Covenant of Omar in Jerusalem in 636AD marked the start of the mass evacuation by settlers of European origin and sealed their fate. Naturally many chose to remain on the land that they had known as their own for generations, and it was not long before they became completely accepted as an integral part of the population of the prosperous Umayyad Empire.

The Nabatean Period 312BC-106AD

Simultaneous with the Greek settlement waves in the northern part of Transjordan, another wave of similar dimension was being mounted by the Arab Tribes of Hijāz known as Al-Anbāṭ or the Nabateans. Their numbers were also large since Petra, their capital city, could have had more than fifty thousand inhabitants in its glorious days. Gradually the Nabateans managed to spread their domain to the borders of Medina in the south and Damascus in the north. Their important cities other than Petra,

such as Madā'in Šālīh, Al-'Ullā, Tayma, Umm al-Jimāl and Bostra also prospered. They intermingled with the Edomites, who were already settled on the land, together with the Moabites, and Ammonites. These new groups formed the bulk of the indigenous Arab Transjordanians at the time of the Arab conquest in 636AD. It is thought by historians that the large tribal federation of Judham was really the fruit of this inter-mixture and that the word Judham is the Arabic rendering of the older Semitic "Edom".

During this relatively short period of five hundred years Transjordan had its great opportunity to become the centre of the Middle Eastern trade with all that such a position gave in influence and wealth. Petra was the centre that received all caravans coming from the Hadramaut via Yemen and Hījāz, as well as those that came from Bahrain via Najd, or from Kuwait via Dawmat al-Jandal (Al-Jauf). The goods received from these caravans were dispatched on the Nabatean caravans the seaports of 'Aqaba and Gaza for reshipment and to Damascus for distribution in Syria. The whole episode must have been one of great challenge at a time when it was most difficult to have the peace that is necessary for trade. However their accomplishments in this field were best described by Ian Browning (1982: 20) when he wrote "By the time the Nabateans were in control of Edom about the beginning of the fourth century BC trade was well established. It was these tough Arab people who lifted it, and no doubt the revenue from it to unprecedented heights. The Hellenistic world would have been able to absorb most of the available supply and China, in its turn, is recorded as importing 'henna, storax, frankincense, asbestos, cloth, silk gauze, damask, glass, orpiment, gold and silver".

The Islamic Period 636-1516AD

In the 650s another wave of Arab tribal settlers was forming continuously, as if to compensate for the loss of the outgoing groups in the Byzantine period. Tribes of the Hījāz, Yemen and Oman who were not in the land prior to the conquest in 636AD were now moving into Transjordan in large numbers. Tribes such as Qays, Rabia, Azd, Billy, Kināna, Kalb, Aws and al-Khazraj were making their settlement felt side by side with the tribes that were, for centuries, already in the area, such as Judham, 'Udhra, Ghasan, Balgain and 'Aamelah. Annuals do not give any reports about disputes for agricultural estates

or pastureland. It is reasonable to believe that, in adherence to the calls of Caliphs, all able-bodied men joined the expeditions to the north against the Byzantines, and to the East against the Persians, and that there was no reason for conflicts over land ownership. Probably this was also caused by a severe shortage of labour that was met with a number of slaves being brought in to work the farms, especially those in the Jordan Valley. The descendants of those brought in, at these times, are now a living witness of the large communities involved in these operations, mainly in the Ghawr districts.

The century that saw the advance and success of the crusades in Palestine and Transjordan was naturally full of population movements. Many Europeans came to the east and many had to leave when the campaign of Salah ad-Din accomplished its final aims and the Crusader Kingdoms and principalities in the east were defeated. During this period movements from Palestine into Transjordan, and vice versa, were common. Those who decided not to leave seem to have been absorbed by the local communities and all that remains now are the European names of some clans and families that have been maintained over a thousand years.

The Transjordanian countryside during the Ayyubid and Mamluk periods must have witnessed population growth as a result of the political importance the area acquired after the end of Crusader times. Tribes were brought in to support the Governors of Al-Karak every now and then. The tribes of Bani 'Uqbah comprising seven thousand souls and Bani Mahdi, whose number is not recorded, were brought in by Sultan Barquq when he was fighting to regain the throne in 1389 (Al-Ghawanmih 1979: 23). Needless to say that they all played a very important part in Transjordan's life during the following centuries.

The Ottoman Period 1516-1918

The Ottoman conquest of Bilād ash-Shām, including Transjordan, was completed in a short while without much bloodshed or destruction of cities. The Mamluk regime in Syria was already suffering decline and even disintegration when Sultan Salim defected the Mamluk army lead by Sultan Qansaw al-Ghuri at Marj Dabiq (near Aleppo) in 1516. The different provinces of Syria fell to the conquerors without fighting and the people may have felt very little of the new regime that was to continue for 400 years (Abujaber 1989: 24).

The first century after the occupation saw some administrative improvements. Many military outposts were built, especially on the Oajj routes, and garrisons were stationed in them to watch over security and the collection of taxes. These taxes were computed as per the Daftari Mufassal (Tax Detailed) Register in 1525AD Seventy years later new registers were evidently needed and the Daftari Mufassal Jadid (New detailed Tax Register) was compiled in 1595/7AD Settled people were already feeling the strains of the new tax collection system and were further concerned about the enlistment of their sons in the army to fight the Empire's wars on the Eastern Front in Iraq and the North-Western Front in the Balkans. At the same time security in the seventeenth century was already weak due to the lack of sufficient numbers of police and Gendarme. As a result, farmers in different parts of Transjordan, started moving to the Ḥawran northwards and Palestine westwards. People from the areas of Wādī Mūsā and ash-Shawbak settled in ar-Ramala and al-Bira north of Jerusalem while residents of aṭ-Ṭafila and al-Karak started migrating to Hebron, the Balqā' and Ḥawrān. On the other hand, people came to the area from Hebron, like the Majalis themselves, and Jerusalem district and Nablus in smaller numbers (Burckhardt 1822: 381, 420). The net result however was negative and the total number of the population of Transjordan in 1812, during Burckhardt's visit, could not have been more than one hundred thousand.

The sixteenth century saw at least one important Bedouin incursion into the area. This was the Banī Ṣakhr Tribe whose original abode was around the Oasis of al-'Ulla in Northern Ḥijāz (Peake 1934: 214). They now number over forty thousand people and were considered, even in 1800, a large tribe of around 1500 tents. Their influence and role in Transjordan's life has been of the greatest importance and the continuous conflict between them and the 'Adwan has been a cause of instability for over three hundred years. The 'Adwan, leaders of the Balqā' Tribal Federation, comprising all the settled tribes in the Balqā' Province, have been continuously attempting to ward off the encroachment of the Banī Ṣakhr on their agricultural lands. Their efforts have been partially successful, as the Banī Ṣakhr was forced to agree to occupation of the land on the two sides of the Ḥijāz Railway. The areas to the west remained in the ownership of the settled tribes such as al-'Ajarma, al-Balqā' and ad-Da'ja

as well as the 'Adwan, leaders of the Federation.

Towards the middle of the nineteenth century a new development occurred when the large Ruwala tribe of the 'Aneze Federation attempted to regularly use the pasturelands of al-Balqā'. Feeling together the danger of this new development, the Banī Ṣakhr and the Balqā' Federation joined hands to stop it at an early stage. Many skirmishes and raids took place before the Ruwala saw fit to withdraw northwards nearer to Damascus. Peace was finally concluded between the Banī Ṣakhr and the Ruwala at the guesthouse of al-Yādūda in 1908.

During these times, a certain inflow of people into the different parts of Transjordan seems to have been a continuous process, probably due to better opportunities for agricultural activity. Many of the settled clans were descendents of people who came from Najd, al-Ḥijāz, Ḥawrān and Palestine. There was also a continuous inflow of Egyptians. Large numbers came with Ibrahim Pasha during his occupation of Syria between 1831 and 1841 and many stayed behind. They also came to avoid the *Sukhra* (forced labour) in the construction work to open the Suez Canal in 1867-1868. Their last movement was when numbers of them joined the British Forces that came with General Allenby in 1917.

Three waves of a special character occurred in the Eighteen eighties when the Circassians and the Chechen started coming from the Ottoman Empire in 1879, the three clans of Karaki Christians moved to Mādabā in 1880, and the people of Nablus started coming to as-Salṭ around 1880. The first was imposed on the Ottoman Authorities by their defeat in the Caucasus and the Romilly when the need for the settlement of these refugees became great. They were settled on the lands of villages that had a running water supply and although they had restless days at the start, their presence in the country has become a positive feature of the pluralism that Jordan is proud of. The second movement was made by free choice and the contribution of the Mādabā clans to agriculture and animal husbandry. The third was composed of nearly one hundred extended families that came to as-Salṭ from Nablus to practice trade in a more or less virgin market. They were craftsmen, moneylenders, landowners and government officials. Their services were greatly valued, and when 'Ammān became the capital, many of them moved to it, thereby the modern city became a mixture of Bedouin, Circassian, Damascene and Nabulsi groups.

The British Mandate 1918-1946

This period was, as far as, population movements were concerned, a continuation of the latter fifty years of Ottoman rule. Many Merchant families continued to come to 'Ammān, which by 1946 had nearly fifty thousand people. Zarqā' was also growing with the camps of the Arab Legion, the Transjordan Frontier Force, and their few thousand military personnel. Irbid, on the other hand, was growing with people moving from the villages to the city and Palestinian and Damascene families making it their permanent residence. During these twenty eight years one cannot ignore the importance of the efficient administration which encouraged people to seek employment or attempt to procure for themselves new opportunities of trade. Transjordan's markets also became a tempting proposition when in 1940 the Middle East supply center in Cairo started allocating generous quotas of imported goods for the Jordanians. The goods were imported by those who could obtain the licenses and many were from neighboring countries. When the commodities arrived they were sold at high profits and later re-exported to Palestine and Syria where shortages of supply created a strong demand.

Another factor that contributed to the economic development of the Transjordanian countryside was the installation in 1934 of the Iraq petroleum Company pipeline with its main station in al-Mafraq. A few years later another line of a military nature, was also built in the north. That was the Eden line organized to repulse any attack on the British Forces from Syria and Lebanon. Such activities brought in people from different countries and generated internal movements of people that are still apparent in az-Zarqā', al-Mafraq and Irbid. Trade activities in this period were given first priority including the export of local products such as cereals and livestock, the prices of which increased tremendously in comparison with the low prices of the thirties.

The Royal Hashemite Kingdom 1946-

The Legislative Council, during its meeting on the 25th May 1946, declared Jordan as an independent state, and King Abdullah Ibn Al-Hussein as a Constitutional Monarch. A new constitution was announced the 1st February 1947 and on the 17th March of that year Prince Talal was awarded the title of Crown Prince. The population was still small and the census of 1938 gave the total number

of Jordanians to be three hundred thousand people. The country was on its way to a new way of life and a better future.

On the 20th July 1951 King Abdullah was assassinated in Jerusalem and King Talal was proclaimed King. Within a short time he declared the need for a new constitution, which was promulgated on the 8th December, 1952. Due to the ill-health of King Talal, his son Hussein was announced King on the 2nd May 1953. A new period for Jordan began on that day and continued for nearly half a century (Al-Mahdi and Musa 1959: 409, 411, 565 and 578).

Within two years however, the whole situation took on a new dimensions with the start of hostilities in Palestine on the 15th May 1948. The first Arab-Israeli war resulted in a large population movement. In August 1952 the Census held by the General Statistics Department registered a population of 587 303 souls. The largest increase happened in 'Ammān where the inhabitants were 108,412 rising from 65,754 in 1946 and an estimated 38000 in 1938 (Al-Mahdi and Musa 1959: 448). The Palestinian refugees were accommodated in the Jordanian Countryside and temporary camps in the West Bank. Few of them were able to move to Syria, Lebanon and Iraq at a time when conditions in the Gulf countries and Saudi Arabia did not offer many work possibilities.

Under these circumstances Jordan's Government was confronted with a difficult new situation that necessitated its cooperation with the United Nations Relief and Welfare Agency (UNRWA). With hard work and continuous sacrifices, matters were gradually brought under control. However in 1967 the second Arab-Israeli War erupted and resulted in a good part of the population of the West Bank (as well as the refugees who were residing in the camps) moving into the East Bank. By June 1968, the number of new refugees rose up to 354 248 (records of the Ministry of Construction and Welfare). To differentiate between the two groups, those of 1948 were called refugees whereas those of 1967-68 were called *Naziheen* (Musa 1996: 227).

In addition to the movements of Palestinians between the West and East Banks there were also movements for purely economic reasons such as that of the Egyptian Labourers who, since the 1970s, have become the main Labour force engaged in agricultural activity. Their numbers vary, but estimates in certain years have put the figure at nearly two hundred and fifty thousands. There were

also unknown numbers of Syrians whose specialty was animal husbandry, and Iraqis who worked in the building and construction projects. Here again the real numbers are not known but the total could reach two hundred thousands. Some fifty thousand more are engaged in domestic services and they come from countries like Sri Lanka, the Philippines, Bangladesh, India, Pakistan and countries of the African Horn. Their presence may seem unnecessary, considering the living standards of the ordinary Jordanians, amongst whom many are unemployed and need work. However local traditions are still very strong and people do not like to be domestic servants. This "Shame tradition" causes the country to do away with a few hundred million dollars per annum as salaries and wages for imported labour.

The last wave of incoming refugees was comprised of a large group of Palestinians and Jordanians, who as a result of the Gulf war in 1990, flocked back to Jordan from Saudi Arabia, the Gulf States (especially Kuwait) and Iraq. Some of them had been living there as expatriates for over thirty years, but conditions after Saddam's occupation of Kuwait forced them to return. There are no exact figures but conservative estimates put those at four hundred thousand. They have been an important element, in recent years, in Jordan's economic and commercial development. Their savings and the indemnifications, paid by the United Nations as compensation for their losses in the Gulf War, were substantial. Once again Jordan (especially its populous capital 'Ammān) had to absorb this large number of people and it is outstanding that the country cope with all the effects of a 10% sudden population increase in an already crowded countryside.

Over the millennia Jordan has had its good share of population movements and has been indeed a corridor. Its 96,000 square kilometres has remained constant but its population has grown to the point where its water resources are already insufficient for the needs of its people. Presently the population exceeds 5.5 million people and is expected to continue increasing at the rate of 2.8%. This means that we may have, due to natural growth only, double the present population in 2020. To complicate matters further our annual per capita income is only USD

1250 or JOR 887.50, our imports are approaching JOR 4.5 million; our exports do not exceed much over JOR 3 million. Some think that our survival during the last fifty years, accompanied by development and improvement of the standard of living for all Jordanians, is indeed a miracle for which we should thank our lucky stars. Others maintain that Jordanians, having been given a progressive and open-minded leadership, have been able to apply their persevering spirit in the service of their country's development and growth. Probably it has been a mixture of these two elements. The generous nature of the hospitable Jordanian combined with the sturdy spirit of the settler-pioneers in the semi-arid fringe of the al-Bādiya, made it possible for Jordan of the twentieth century to withstand all political storms and population waves and relatively prosper in spite of the adverse odds every now and then.

Bibliography

- Abujaber, R. 1989. *Pioneers Over Jordan*. London: IB. Tauris.
- Browning, I. 1982. *Petra*. London: Chatto & Windus.
- Burckhardt, J. L. 1822. *Travels in Syria and the Holy Land*. London.
- Al-Ghawanmih, Y.D. 1979. *Sharqi Al-Urdun Fi 'Asr Dawlat Al-Mamluk Al-'Ula* (Arabic). Amman: Ministry of Culture and Youth.
- Helms, S. W. 1981. *Jawa, lost City of the Black Desert*. New York: Cornell University Press.
- Homés – Fredericq, D. and Franken, H. 1986. *Pottery and Potters*. Tobingen.
- ji, C-H. 2002. *Madaba Plains Project 'Umayri*. Michigan: Andrews University.
- Lehmann, J. 1977. *The Hittites*. New York: The Viking Press.
- Al-Mahdi, M. and Musa, S. 1959. *Tarikh Al-Urdun Fi Al-Qarn Al-'Ishrin*, Vol. I (Arabic). Amman.
- Millar, F. 1993. *The Roman Middle East*. Harvard University Press.
- Musa, S. 1996. *Tarikh Al-Urdun 1958-1995*, Vol. II. Amman: Al-Muhtassib.
- Peake, F. G. 1934. *The History of Transjordan and its tribes*. Jerusalem: Islamic Orphans Press.
- Simmons, A. 1995. Town planing in the Neolithic. *SHAJ* 5: 119.

