UNIVERSITY OF SOUTHAMPTON

THE BRITISH ROLE IN THE DEVELOPMENT OF AN INFRASTRUCTURE IN TRANSJORDAN DURING THE MANDATE PERIOD, 1921-1946

VARTAN MANOUG AMADOUNY

Thesis Submitted for the Degree of Doctor of Philosophy

Faculty of Science

Department of Geography

February 1993

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF SCIENCE

Doctor of Philosophy

THE BRITISH ROLE IN THE DEVELOPMENT OF AN INFRASTRUCTURE IN TRANSJORDAN DURING THE MANDATE PERIOD, 1921-1946

By Vartan Manoug Amadouny

The thesis argues that the Mandate period was the pivotal moment in the creation of a modern state in TransJordan. Its central core examines the creation of infrastructural provision on two levels. On one level is the creation of an infrastructure of power, evidenced by the centralization of political power in Amman, and based on a Royal Court, the armed forces, the judiciary, and circumscribed by international boundaries. On another level, but in part stimulated by political pressures, were developments in the physical and social infrastructure, and the attempt to modernize agriculture, transport, communications, health and education. The British imposed their own political arrangements on TransJordan, but inherited the modernizing impulse of the late Ottoman period in society and the economy. However, the economic record of the Mandate period is disappointing, mainly because the country was wracked by a protracted drought between 1924 and 1936, and starved of funds for investment capital by the regime of financial austerity imposed by H.M.Treasury. Nevertheless, the Mandate period changed the shape of TransJordan, it maintained a process which led to a reordering of TransJordan's spatial contours, favouring the sedentary communities over the nomadic tribes. These spatial transformations, and the creation of governmental institutions in TransJordan combined to lay the foundations of a modern state.

CONTENTS

LIST OF MAPS USED IN THE TEXT

ACKNOWLEDGEMENTS

I am profoundly grateful to the University of Southampton for financing this research through its 'Linked Studentship' scheme. In addition, the University provided me with financial assistance in order to meet some of the costs incurred in travelling for research, and other expenses. I would also like to extend my gratitude to the staff of the Hartley Library, the Parkes Collection, and Inter-library loans, for their professional work.

I am deeply indebted to the Geography Department, who have provided me with an enviable range of research facilities without which this thesis could not have been produced. I am particularly grateful to the Department for funding the greater part of my study tour to Jordan in 1990. I must also thank Professor Malcolm Wagstaff for his advice and encouragement, Alan Burn and the staff of the Cartographic Unit for their excellent work on my maps, and Dr Jim Milne for his assistance with computing.

I thank the Royal Society for contributing to my study tour to Jordan in 1990. In Jordan, I am pleased to record my thanks to Mustafa Hamarneh, Mreiwad Tell, Ali Dajani, and Raouf AbuJaber, for giving me the opportunity to discuss the Mandate period with them. I am also delighted to thank the British Institute for Archaeology and History at Amman, its staff and the numerous guests that I met there, for their hospitality and intellectually stimulating company.

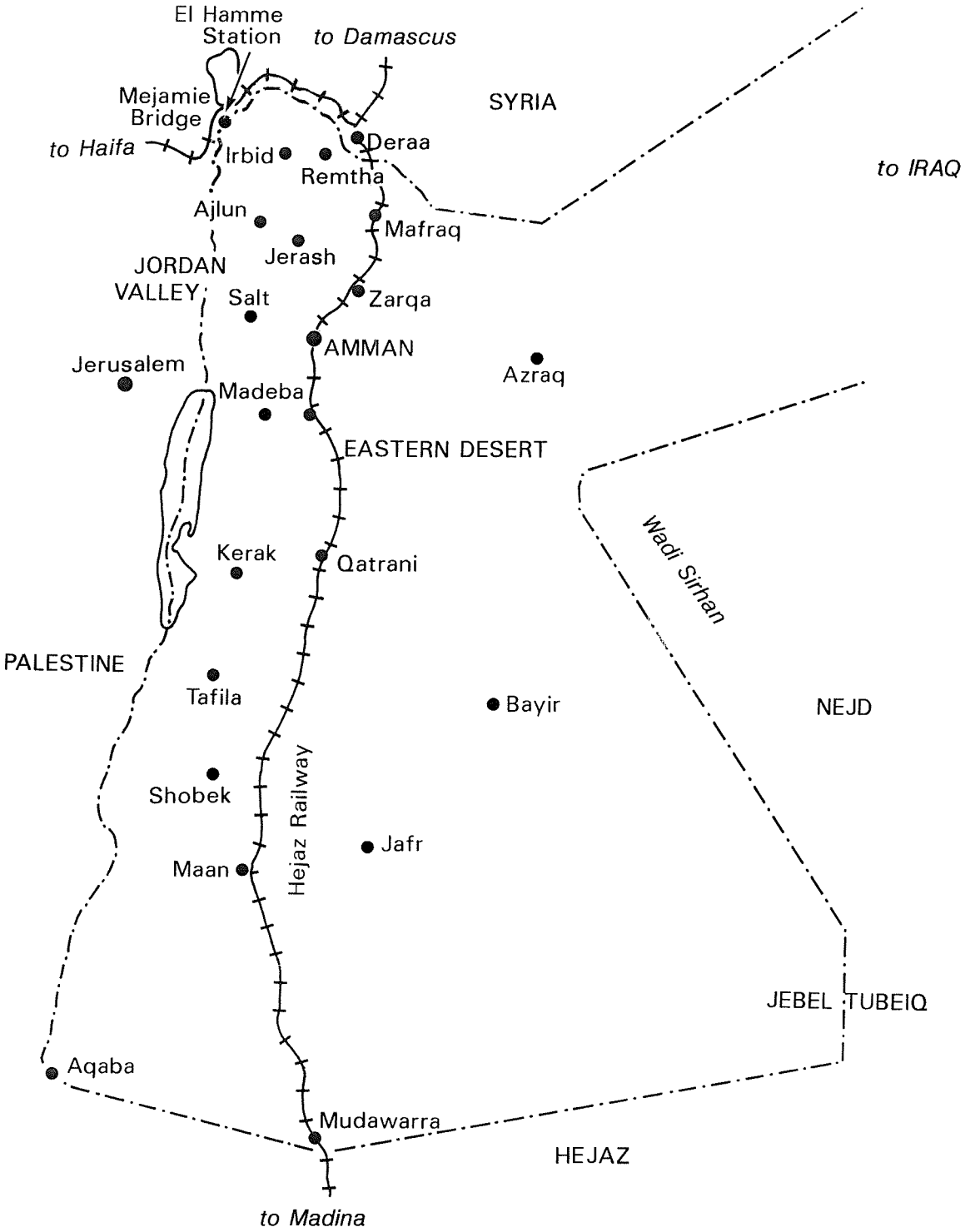
Tariq Tell has been an endless source of enthusiasm for this topic, and I am grateful to him for his encouragement, and his encyclopaedic knowledge of Jordan. I would also like to thank all those who have supplied me with documents, references, questions and answers, and moral support. In particular, I am grateful to Lars Wåhlin, Michael Fischbach and Abla Amawi, Alison McQuitty, Carol Palmer, and Joanna Lewis.

I owe an enormous debt to Brian Birch for his rigorous supervision of the thesis, for his wise counsel, and his inexhaustible patience.

Lastly, my greatest debt goes to Lucy, Victoria, and Anahid, who have supported me for more years than I dare reveal, and who stepped in at various critical moments to make sure that this thesis would not have to be abandoned.

ABBREVIATIONS USED IN THE TEXT

Annual Report	Report by His Britannic Majesty's Government in the United Kingdom and Northern Ireland to the Council of the League of Nations on the Administration of Palestine and TransJordan
ARDOH	Annual Report, Department of Health
CDAC	Colonial Development Advisory Commission
CMS	Church Missionary Society
MESC	Middle East Supply Centre
SAC	St Antony's Collection



Map 1 Location map

PART ONE

THE FRAMEWORK FOR THE ANALYSIS

CHAPTER ONE
INTRODUCTION

1. The Background to the Thesis

This thesis is a contribution to the reappraisal of the Mandate period in TransJordan which began to emerge in the 1980s. Some of this new research examined Anglo-Jordanian relations in the years which followed the First World War (Guckian 1985, Wilson 1987, Abu Nowar 1989), while some has looked at certain aspects of the political, social and economic history of the Jordanian state in this early period (Hamarneh 1985, Robins 1988). However, a systematic examination of developments in administration, agriculture, transport and communications, and health and education, has not been attempted until now. This thesis brings these sectors together and argues that they comprised a developing infrastructure in TransJordan at the political, economic and social levels. This reappraisal of TransJordan's early history has begun to make amends for the serious gap in the literature on modern Jordan which existed until very recently, as was noted by Louis (1984:345, n1), Wilson (1986:230), Bidwell (1989:298), and Yapp (1991:460-461).

A New Research Agenda

In recent years there has been a recognition that radical changes were taking place in TransJordan before the Mandate period, as a consequence of the Ottoman Empire's internal reforms (the '*Tanzimat*') of the mid-19th century, and the growing incorporation of the eastern Mediterranean region into the international economy between 1850 and 1914.

Ottoman political authority, which had lapsed between the late 16th and mid-19th centuries, was effectively re-established in northern TransJordan from 1867 onwards, and was being extended into the central-southern district of Kerak prior to the outbreak of War in 1914. Growth in the economy in TransJordan was stimulated throughout the late Ottoman period by the demand from regional and international markets for the Empire's primary products. In TransJordan between 1850 and 1914, this economic demand caused more land to be placed under cereals and fruit cultivation, and there was an expansion of interest in TransJordan's economy by merchants from Palestine and Syria.

These political and economic events, together with the reform of land tenure which began in the late 1870s, initiated a transformation of the social structure in TransJordan, favouring the sedentary communities over the desert-based nomads. In the period between the late-16th and mid-19th centuries, the sedentary and nomadic communities had existed in a relatively balanced, complementary relationship. After

the restoration of Ottoman rule in 1867, however, there was a distinct bias in Ottoman policy which favoured the sedentary communities in the cultivable zone. The sedentary way of life was further buttressed by the resettlement of Caucasian immigrants in the Belqa in the 1870s and 1880s, and this placed considerable pressure on those nomadic tribes that used cultivable land in the Belqa on which to graze their flocks.

The transformation that was being initiated in TransJordan in the late Ottoman period marked the beginning of the modern era, with all that implies with regard to domestic economic change, and the incorporation of the Ottoman Empire into an avowedly capitalist international economy. Thus, in recent research, the changes that were taking place in the late Ottoman period have been perceived as essential in understanding the context in which the Mandate began in 1921. Though profound political changes were imposed on TransJordan by the British after 1921, the socio-economic changes that that the British inherited from Ottoman rule continued to take effect throughout the Mandate period (Rogan 1991; AbuJaber 1989; Wåhlin 1992).

Using the Ottoman background as a precursor to an analysis of events in the Mandate period has provided current research with a broader perspective on TransJordan. The research now being undertaken into the land reform programme during the Mandate, the role of the merchant classes, the impact of the Mandate on the tribes of TransJordan, and the research in this thesis, has opened to view a history that had hitherto been obscured [1]. It is no longer possible to say of the Mandate period 'There is nothing to record except the gradual constitution of an indigenous government under unobtrusive British control. The problem of relations between Bedouins and settled folk, always acute in a region on the edge of the desert, was solved by tact and the creation of the Arab Legion' (Hourani 1946:24). Such a view was shared by Lenczowski (1962:450) who described the Mandate period as 'relatively uneventful'. It is a view that has most recently been repeated by Beaumont, Blake and Wagstaff (1988:408).

The new research agenda has challenged two views of TransJordan's history that have dominated the literature for many years. One has argued that the Mandate period was relatively uneventful (as cited above), while the other has perceived TransJordan's transhistorical rhythmns as a recurring cycle of prosperity and depression.

Periods of prosperity were associated with the maximum exploitation of TransJordan's resources by numerous sedentary farming communities. These were allowed to flourish by the provision of strong government -often imposed by outsiders- which curtailed the raiding activities of the 'robber bedouin'.

Periods of depression were associated with the breakdown of government and the subsequent decline of agricultural production on the basis of sedentary farming, leading to the ascendancy of nomadic power. The desertion of villages created a backward frontier zone, riven by mutual hostilities between the 'desert and the sown'. Such views have been common in much of the literature on TransJordan published this century (Abidi 1965:1; Casto & Dotson 1938:128-124; Hamilton 1928:86; Hütteroth & Abdulfattah 1977:56; Lowdermilk 1940:228, 1944:143; Raglan 1924:837; Shwadran 1959:4-10; Sinai & Pollock 1977:21; Vatikiotis 1967:33; "Xenophon" 1924:624).

This cyclical view of TransJordan's history was particularly influential at the outset of the Mandate period, when some argued that the last great 'age of prosperity' had been experienced under Roman rule. It was an argument that the Zionist leader Chaim Weizmann used in order to plead the case for Palestine to include the territory east of the River Jordan (see Chapter Five). It was also a view expressed in a history of the Roman empire published at the time (Rostovtzeff 1957:271-272; Wagstaff 1985:216). The suggestion was that what had been achieved in TransJordan by an Empire of the past, could be recreated under the Mandate administered by the British Empire.

The new research agenda has challenged this paradigm by opening up particular periods of TransJordan's history to a more intensive scrutiny than ever before [**2**]. The pattern of human settlement, for example, can now be seen to have been more fluid and subtle than was acknowledged before. The evidence of the Sirhan at Mafraq (al-Omosh 1991:63), and of Christian farmers at Smakia on the Kerak plain (Lancaster & Lancaster 1989:16-17) suggests that a return to village life involves a lengthy process in which people living in tents on a permanent site, only gradually move into fixed dwellings over a period of many years. In these environmental conditions, Rogan (1991:148) and Wåhlin (1992:100) have both argued for the existence of 'plantation villages', which 19th century travellers had assumed denoted a nomadic rather than a sedentary existence.

Consideration should also be given to Braudel (1972:172), who argues that in the Mediterranean region, cycles of settlement and desertion can be a deliberate strategy pursued by settlers and nomads in order to preserve the soil from exhaustion by excessive farming [**3**]. Thus, while the intensity of farming in northern TransJordan might well have fluctuated between the late-16th and mid-19th centuries, agriculture and trade between the 'desert and sown' was maintained. In this respect, the late Ottoman period was important because it saw the tilt toward agriculture which became pronounced from the 1880s onwards, and which upset the balance between settlers and nomads that had existed.

Sources for the Study of the Mandate Period

The new research agenda has exploited greater access to original sources than was possible before. Official reports from the Mandate period have for many years been neglected. Foreign and Colonial Office records were withheld under the 50-year, later the 30-year rule, and material on the Mandate period was not accessible to the public until the mid-1960s. More recently, archival sources in Amman have been discovered which throw new light on both the late Ottoman and Mandate periods (Rogan 1989; Amawi & Fischbach 1991).

The source materials on the Mandate period consist of official publications and of other documents written by Government officials, and travellers to TransJordan. The official reports largely comprise the annual reports submitted by the Mandate administration to the Permanent Mandates Commission [PMC] of the League of Nations. The increase in the scope of the annual reports through the years can be accounted for by a growth in Colonial interest in TransJordan's administration, and in the documentation of its growth by the officials in charge. As the administration of TransJordan expanded, so the volume of files on a broader range of topics also expanded (Birch 1988:147).

This primary literature is supported by a range of literature which falls into two categories. In the first are a series of books and articles which were written by officials of the TransJordan or Palestine Governments. These are important sources of data as well as argument other than the issues dealing with Britain's relations with the Emir Abdullah, and the creation of the Arab Legion (Luke & Keith-Roach 1922, 1930, 1934; Mackenzie 1946, Peake 1939; Raglan 1924; Toukan 1944).

In particular, papers written by officials are useful sources on the people and resources of TransJordan. There are rival discussions of the situation of the nomadic tribes (Epstein 1938; Glubb 1938), while on land reform, there are two useful discussions by G.F. Walpole (1944; 1947) who was for many years the senior official in the Lands and surveys Department. M.G.Ionides, Director of the Department of Development (1937-1939) published articles (1940; 1941; 1946) based on his authoritative report on TransJordan's water resources (1939).

In another category can be placed a number of articles by travellers and observers of the Middle East scene, and TransJordan in particular. Although they are primarily interesting for their quotidian information, some have a specific focus, for example the paper by 'M.A' (1934) on fishing in Aqaba and the paper by Nieter (1932) on the Bedouin. But most are only useful for providing a snapshot of life in TransJordan at

the time they were published (Hamilton 1928; 'Durbin' 1929; Landau 1937; Pumphrey 1935; "Xenophon" 1924; Woods 1925).

Some of the early commentaries on the political situation in TransJordan were particularly stimulated by the United Kingdom-TransJordan Agreement of 1928 and the political agitations which this produced in the country (Chizik 1935; Kohn 1929; 1935, Schechtmann 1937). Cooke (1952), Dearden (1958) and Shwadran (1959) also offered limited commentaries on the political situation in the Mandate period, but it was only in more recent years that Kazziha (1967; 1979), Guckian (1985) Robins (1988), Wilson (1987) and Abu Nowar (1989) have looked in any detail at the early political developments using original source material in addition to the annual reports to the League of Nations. Rather earlier, Cooke (1952) offered an assessment of the land reform programme, and Dearden (1958) examined the problems of TransJordan's water resources, but these can now be seen as merely the modest beginnings to more complex investigations which are still underway.

A number of general interest books, which did not pretend to offer a scholarly analysis of policy issues for the Mandate period appeared in the 1950s and 1960s (Harris 1958; Patai 1958; Randall 1958; Sanger 1963). But none of these studies treated the period before 1947 as fully as the period after.

The geographers played their part in producing some of this early literature. Casto & Dotson (1938) and van Valkenburg (1954) produced early economic geographies. There are useful geographical sections in Luke and Keith-Roach (1934) and a wealth of detail in the Handbook on Palestine and TransJordan produced by the Admiralty's Naval Intelligence Division (1943). These works provide some basis on which a more analytical treatment of TransJordan can be made. The same is true of the reports by the teams from Durham University (Atkinson et al 1967; Fisher et al 1966; Willimott et al 1963, 1964, 1965) though these reports are more useful for more recent times. However, historical geography is still only a growing sub-discipline of geography, and studies on TransJordan of the kind produced by Kark (1989); McCarthy (1991) for Palestine, have yet to emerge, though Hamarneh (1985) is of central relevance to this viewpoint.

There is one other body of literature on TransJordan's history to which attention should be drawn. This is the product of those (primarily Zionists and their sympathisers) for whom the Balfour Declaration of 1917 and the Mandate for Palestine and TransJordan constituted the political and legal guarantees upon which the creation of a 'Jewish National Home' in Palestine was to be made a reality. In particular, they argued that the original intention of the British Government was to include TransJordan in the

territory defined as Palestine, and the decision in 1922 to insert into the text of the Mandate a single clause excluding TransJordan from the terms of the Balfour Declaration amounted to a betrayal of Britain's earlier promises (Schechtmann 1937, 1968; Ficheleff 1932). This, in turn, led to the invention of the opinion that on the basis of what was originally agreed in 1917 and enacted in 1922, 'Jordan is Palestine', a view still held by some today (Carmichael 1991; Wecht 1992).

The Palestine Economic Society published Grunwald's (1932) analysis of the financial regime in TransJordan, but in the circumstances of the time -the country was afflicted with drought and economically depressed- the study was premature. Adolph Konikoff's economic survey (1943, 1946) has become the standard reference work on the economy of TransJordan. Although his statistical base is generally accurate -being derived from the figures in the annual reports to the League- some of his judgements, for example, that TransJordan's farmers were backward, seem less accurate. Also, Konikoff did not place sufficient emphasis on the impact of the drought that afflicted TransJordan, particularly between the years 1924 and 1936, and in individual years after that. Lastly, the Zionist journal 'Palestine' published five articles on TransJordan in 1937, all of which were designed to draw attention to the better economic record of Palestine as a consequence of Jewish colonisation and investment.

Apart from this biased literature, much that was published on TransJordan before the 1980s presented an unbalanced view of the Mandate period, and also contained factual errors. For example, following the end of the First World War, TransJordan (excluding Ma'an and Aqaba) was administered from Damascus by the Emir Feisal as part of the Occupied Enemy Territory Administration [OETA]-East (Luke & Keith-Roach 1934:463-464; Naval Intelligence Division 1943; Tripe, SAC/1942:4). Nevertheless, at least five authors place TransJordan in the area administered from Jerusalem, OETA-South (Abidi 1965:3; Allen 1974:273; Aroian & Mitchell 1984:166; Baylson 1987:84; Sands 1970:284), while Klieman (1981:14) and Fromkin (1989:441) both refer to TransJordan as 'eastern Palestine' **[4]**.

Also, the Mandate period has been the target of ridicule by some of its historians. Lenczowski (1962:451) described Britain's cultivation of the Emir Abdullah as 'opera-bouffé' (sic). Schechtmann (1968:6) opts for 'opera-bouffe', while Sanger (1963:350) describes the Emirate as 'opera in the desert', and Sands (1970:287) describes TransJordan as 'a sort of Graustark-Ruritania'. These comments reveal nothing about the serious and complex issues at the heart of the Mandate period; they do mark a low point in the academic literature on Jordan in general.

2. The Argument of the Thesis

The Concept of an Infrastructure

Infrastructural development refers to a process whereby a network of support services enable the political, economic, and social life of a human community to function with maximum efficiency. The political infrastructure of a modern state, for example, should provide an authority with the means to enforce its commands from a central position across the territory. The economic infrastructure should provide society with the mechanisms for an efficient system of production, and the social infrastructure should provide people with the means of interacting with each other at all levels of life.

The focus on infrastructural development in this thesis is an attempt to bring together for analysis, many of the secular and human forces that were at work in TransJordan during the Mandate period, and which changed its social and economic structure. The combined effect of these changes with the new political order established in 1921, helped to lay the foundations of a modern state. In TransJordan during the Mandate period the political infrastructure consisted of the institutions that were created by the British, in part to honour their commitments to the Hashemites that were made during the First World War, and in part to administer the Mandate with the minimum of cost to British taxpayers. The economic infrastructure was developed in order to support agricultural production, which in its turn was designed to make TransJordan self-sufficient in foodstuffs, and generate tax revenue for the benefit of the administration of the territory. The social infrastructure that was created was intended to provide the population with basic health and education services. Changes took place during the Mandate period at all three levels, and however slow the pace of that change was and the obstacles that were encountered, they helped to lay the foundations of a modern state in Jordan.

That a modern state should have been the outcome of these changes is almost accidental. When long term socio-economic change began in the late Ottoman period, it was intended to integrate the provinces of the Empire into a unified whole. However, after the First world War, political change partitioned the Syrian provinces of the Empire into separate states. TransJordan was then inserted into what Philip Khoury (1987:45) has described as the paradox whereby Britain was expected to administer TransJordan under the terms of the Covenant of the League of Nations, but was also determined to administer TransJordan in line with its imperial interests.

The implication of article 22 of the Covenant was that the 'A' class Mandated territories in the Middle East, would, at some unspecified time, become independent states. The Mandatory powers, Britain and France, were expected to promote the

welfare and development of the people under Mandatory rule, and again, it is implied that these actions were designed to strengthen the basis of 'national self-determination'.

Britain's imperial interest, on the other hand, viewed TransJordan in terms of a wider strategic interest, namely, the imperial route to India (Monroe 1963:11-12). Britain's economic interests in the Middle East were primarily in Egypt and the Persian Gulf, but aside from these areas, the Middle East was a land and sea bridge to India. The acquisition of Palestine and TransJordan in the age of the aeroplane also meant that these countries became an important air corridor running from Cairo to Baghdad and beyond.

In addition to this, the British Empire was run on the basis that its colonies would 'pay their own way' and not be a drain on H.M.Treasury, and the Mandated territories were expected to follow this example. But it is also the case that the British had, in Elizabeth Monroe's words, an 'itch to administer maladministered peoples' (1963:82). Thus, when colonial administrations intervened to bring modern technology to British India and east Africa, it was justified on the grounds of an 'improvement ideology' [**5**], although in the interwar period the issues surrounding 'improvement' (that is, unfettered capitalist development), were hotly debated in the Colonial Office (Phillips 1989:3-9).

Britain wanted TransJordan to be a peaceful, politically stable country, generating enough domestic product to reduce, if not eliminate altogether, the annual subsidy or Grant-in-Aid. But it is also the case that as Britain changed the political order in TransJordan, measures that were designed to secure the authority of the Emir Abdullah and of the British Mandate, were also of some benefit to local commerce. The roads that were upgraded to improve military access to villages for the purpose of tax collection, could also be used to take goods to market.

Because of TransJordan's subservient relationship with Britain, there is a convergence here of two concepts of infrastructure, the 'infrastructure of power' proposed by Mann (1986), and a more conventional concept of the physical, social and industrial infrastructure proposed by Cowie, Harlow and Emerson (1984).

Mann has argued that in the past, empires have been sustained by an infrastructure of power based on political, military, economic and ideological domination. He has identified a process in which the key features of control for an occupying power are the organization across space and time of the logistics of power: men, materièl, and interlocking systems of communication and supply. The presence of an occupying

army that has pacified the countryside is sustained by an extensive system in which there is a convergence of the supply needs of the occupiers and the economic needs of the occupied.

A successful occupation can produce political stability, and stimulate economic growth in two ways. One way arises from the occupying forces engaging in development works, such as minor irrigation or farming projects, initially to feed themselves, but projects beneficial to the local economy too [**6**]. Other public works can also be undertaken, but most likely through corvée labour. Farming can benefit from the occupation, apart from the minor engineering works referred to. The presence of occupying troops can constitute an expansion of market opportunities for local producers. An occupying army can also integrate the colony into the empire by standardizing its fiscal system, with regard to taxes, currency, and weights and measures (Mann 1986:146-153). What this infrastructure provides is the framework for a 'military Keynesianism', whereby the presence of an occupying army, far from being a drain on the local economy, acts as a stimulus to economic growth.

There are strengths and weaknesses in applying this concept of an infrastructure of power to TransJordan. In the Mandate period, there was no occupying army comparable to the Roman period, although the expansion of the British troop presence in Palestine and TransJordan in the 1940s did increase the demand for foodstuffs which TransJordan's cultivators were able to meet. TransJordan was also integrated into the British Empire's fiscal system, as its banking and currency arrangements brought TransJordan into the Sterling Exchange Area. That local taxes, weights and measures were retained, and because of shortages local currency also, does not deny the importance of this integration.

The importance of Mann's model lies in the view that to retain power, empires need to control the space designated as a colony, and that this means exercising control over territory. This conforms with the way in which TransJordan was incorporated into the British Empire as part of the imperial route to India. It is also a part of the strategy which required the Government in Amman to have rapid access to all parts of TransJordan, for the purposes of internal order and defence from outside. Modern means of transportation and communications were introduced, initially for military purposes. In order to demarcate the limits of the Government's authority, the territory of TransJordan was provided with international boundaries. To stimulate self-sufficiency, the Government promoted land reform. In sum, political decisions had economic consequences, and many of these consequences were also converging with the socio-economic trends which had begun to emerge in the late Ottoman period.

One aspect of the terminology must be made clear here. References to the TransJordan Government are to the officials of the central and local Government apparatus, including the Emir Abdullah, British officials in the Government, and from 1929 onwards, elected members of the Legislative Council. Distinct from the TransJordan Government is the Mandate administration, the latter refers to the network of officials consisting of the British Resident and his staff in Amman, the High Commissioner and his staff in Jerusalem, and the Colonial Secretary and his staff in London. These were the men who administered the Mandate for TransJordan on behalf of the League of Nations.

A more conventional view of infrastructure has been proposed by Cowie, Harlow and Emerson (1984). Unlike the historical perspective proposed by Mann, their model provides a sector-by-sector analysis and is intended to provide a coherent view of the structure of the modern industrial state. The authors consider socio-economic processes as made up of three types of infrastructure, 1) a basic or physical infrastructure, composed of transport and communications, water supply and sewerage, and energy supplies; 2) a social infrastructure composed of housing, hospitals, schools and recreational facilities; and 3) an industrial and commercial infrastructure, comprised of factories, offices and research facilities. This schema has its uses for TransJordan only inasmuch as a physical and social infrastructure began to appear in the Mandate period. Indeed, much of the analysis of infrastructural development in this thesis is concerned with the non-political foundations of an emerging modern state, whereas as Cowie, Harlow and Emerson are clearly discussing infrastructural provision in an existing, and highly industrialized modern state.

The Structure of the Thesis

The thesis is divided into three parts. In this first part, to be completed by the next two chapters, the framework for the analysis of the Mandate period is provided. Chapter Two considers the secular and human forces the Mandate inherited in 1921. Particular attention is paid to TransJordan's natural resource deficits. Nevertheless, socio-economic developments in the late Ottoman period revitalized the agricultural sector, and led to an expansion of human settlement in the cultivable zone of the country.

These changes were continuing to take place when the Ottoman Empire formed an alliance with the German Empire in 1914. Chapter Three considers how Britain's interests in the Middle East were intensified by the First World War, and how in the years between 1915 and 1921, TransJordan, which had previously been of little interest to Britain, after 1918 acquired an important place in Britain's overall strategic interests in the region. The first part, therefore, ends with TransJordan being established as a League of Nations Mandate under British control.

The second part of this thesis comprises an extensive survey of infrastructural development between 1921 and 1946. Having acquired responsibility for TransJordan from the League of Nations, and having installed the Hashemite Abdullah ibn Hussein as Emir, the British proceeded to create a political-administrative infrastructure to support their interests in TransJordan. Chapter Four considers developments in this sector with regard to the general political arrangements of the territory, the formation of international boundaries, the creation of the armed forces and the judiciary, and the financial infrastructure that was established to support the Government and the economy.

In TransJordan during the Mandate period, agriculture was the primary form of economic activity. At the outset of the Mandate there was no coherent agricultural policy, but after 1924, land reform became the dominant feature of Mandate policy in this sector. The lack of a coherent policy on the purely economic aspects of agriculture came under intense public criticism in the early 1930s, when attempts were made to develop policy initiatives with regard to a range of resources and agricultural inputs. Developments in land reform and agricultural policy, and the impact they had on establishing an economic infrastructure during the Mandate period are discussed in Chapters Five and Six.

Changes in transport and communications had a profound effect on TransJordan's political and social life in the Mandate period, as rapid increases in mobility facilitated the extension of central power from Amman across TransJordan. But modern modes of transport were also an important feature of the infrastructure of power, and are discussed in Chapter Seven.

To complement the political and economic life of TransJordan, there was an insatiable demand for education amongst the people, and some advance was made towards establishing a health care system across the country. More services were provided than had been the case under Ottoman rule, however, financial problems in the Mandate period meant that developments in health and education were slow to materialize. These sectors are discussed in Chapters Eight and Nine.

Industrial developments have not been examined in this thesis beyond a few remarks in Chapter Ten. The physical and economic infrastructure was not sufficiently developed to facilitate industrial production before 1946. The modest beginnings of the minerals industry in the 1940s were handicapped by problems of transport, labour, and supply. The tourist industry was dependent upon visitors to Palestine, and as the numbers of tourists to Palestine declined after 1936, owing to the troubles there, so the numbers

fell in TransJordan. Developments in housing in Amman and other larger towns and villages have not been examined owing to the lack of documentation on the subject.

Chapter Ten, as the third part of the thesis, comprises an overall assessment of the Mandate period with regard to the development of an infrastructure for an emerging modern state. The chapter considers how far Britain met the conditions of the Mandate as laid down by the League and how far Britain's imperial interests were served by the Mandate. It considers how the Mandate affected life in TransJordan, for during this period the territory changed its shape and began to emerge as a modern state.

CONCLUSION

A new appraisal of the Mandate period in TransJordan began to emerge in the 1980s. This research questioned many of the assumptions about TransJordan that had been dominant for many years. By engaging in more empirical research, and by using original documents from the period, a different profile of TransJordan has begun to emerge. Instead of a relatively backward area of the Ottoman Empire, marked by a deep cleavage between sedentary cultivators and nomadic tribes, TransJordan is now seen at that time as a part of the Syrian provinces that experienced the impact of modernization that was taking place across the Empire. Throughout the late Ottoman period there was an expansion of cultivation for commercial purposes. Relations between the 'desert and the sown' changed. What had been a relationship characterized by mutual need began to favour the sedentary cultivators, largely propelled by the latter's increasing importance, economically and politically.

These trends continued to take effect in the Mandate period. In particular, the tilt towards the sedentary zone became more pronounced as the independence of the tribes was adversely affected by drought in the years between 1924 and 1936, and by the creation of international boundaries. The creation of a Hashemite Emirate centred on Amman, was conclusive proof that political power now lay outside the immediate grasp of the desert-based tribes.

Over time, but slowly, the foundations of a modern state were laid. Thus, by focusing on the provision of an infrastructure in TransJordan one is focusing on both the infrastructure of power which sustained Britain's role as the Mandatory power, and on the physical and social infrastructure, from roads to schools. The broad range of provisions across these sectors will be examined in the main body of the thesis. The next chapter will consider what 'raw materials' the Mandate had to work with, in the form of TransJordan's physical and human geography.

NOTES

1. Land reform has been examined by Michael Fischbach, and the Merchant Classes by Abla Amawi, both at Georgetown University in the USA. Tariq Tell at Oxford is examining the desert-based tribes, and these projects, plus others will form part of an anthology on Jordanian history to be published in 1993.

2. See Johns (1989) for a reappraisal of the historical evidence concerning human settlement on the Kerak plain in the period between the late-16th and early-19th centuries.

3. This crossover has also been suggested for the prehistoric period by Betts (1986:300), with desert-based tribes exploiting opportunities in the cultivable zone, while normally sedentary farmers exploited desert resources.

4. The simple task of identifying personnel has on occasion proved to be difficult. Both Spencer (1962:205) and Aruri (1972:26-27) claim that when Philby left the office of Chief British Representative in Amman in 1924, he was replaced by Sir Percy Cox, rather than by Sir Henry Charles Fortnum Cox (Aruri even has Perry Cox in his index!).

5. For example, in 1848 the Governor-General of India, Dalhousie, declared that 'railways, uniform postage and the electric telegraph' were the 'three great engines of social improvement', while in the 1890s, Joseph Chamberlain said that 'what is wanted in Uganda is what Birmingham has got...an improvement scheme' (Low 1973:53, 64). Lord Lugard was famous for summing up the material development of Africa in one word, 'transport', but he was also keen to see the development of health and education services, and of public works, in the colonies. For Lugard, the League of Nations 'B' Class Mandates were an extension into Africa of Britain's civilizing mission (Lugard 1929:52-59).

6. Falls (1930:425) records the measures that were taken by the Egyptian Expeditionary Forces [EEF] after their occupation of Palestine in 1917. These included a variety of infrastructural improvements, to transport and communications, and to local agriculture. They were designed to make the military occupation of Palestine effective and self-supporting. It should also be noted that the EEF constructed a railway section across the Sinai peninsula, both to facilitate the Palestine campaign, and create a supply line to Egypt once Palestine had been occupied.

CHAPTER TWO

TRANSJORDAN: THE PLACE AND THE PEOPLE

Introduction

TransJordan's location and its environmental characteristics have meant that conditions for the population have fluctuated from period to period from a poor existence based on subsistence agriculture and grazing to relative prosperity based on the production of an exportable surplus of goods.This chapter will consider those features of TransJordan's physical and human geography which played an important role in shaping events in the Mandate period.

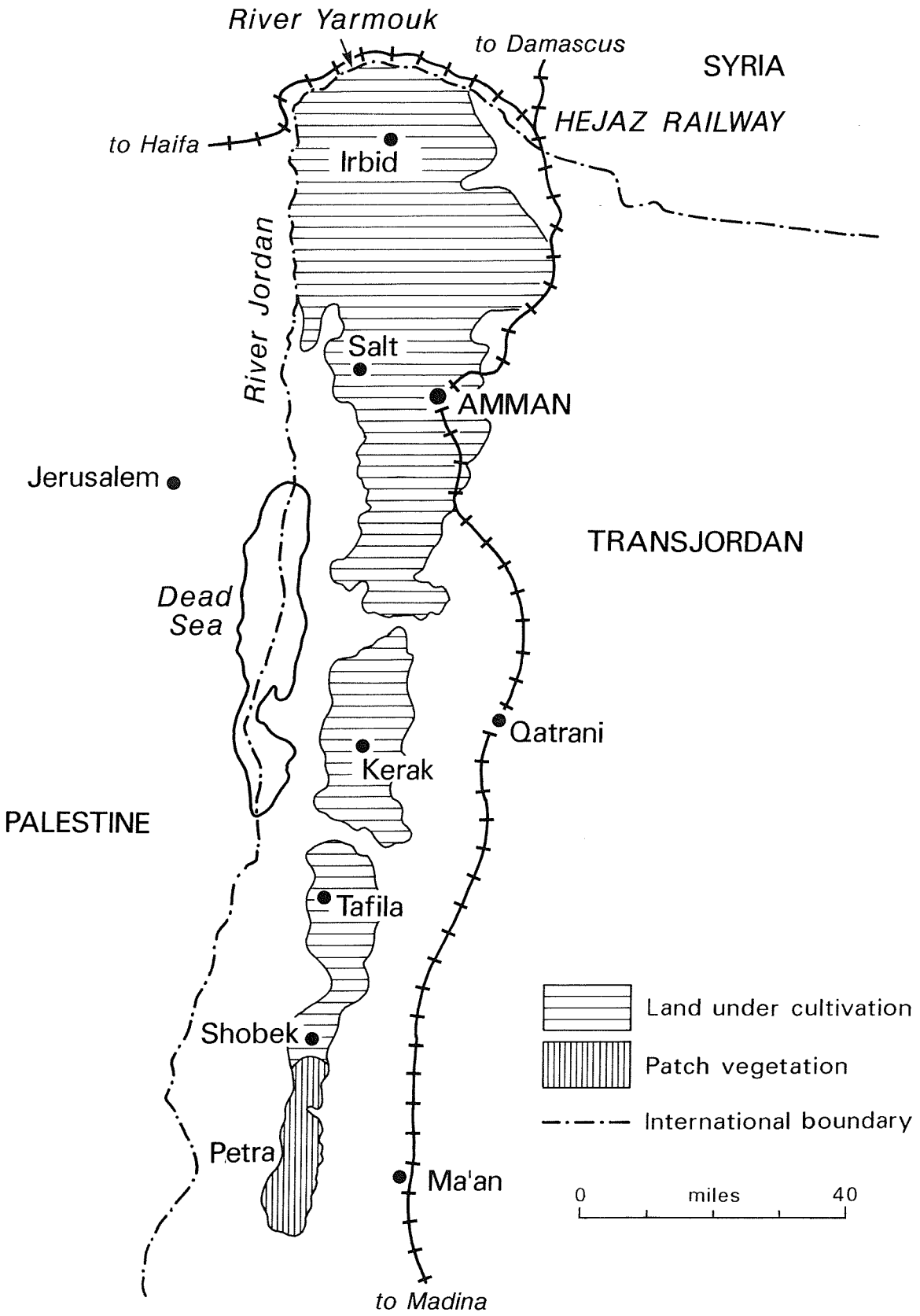
1. Physical Geography

Topography

TransJordan is located on the outer rim of the eastern Mediterranean region where cultivable land merges into the deserts of southern Syria and northern Arabia. It has three distinct regions. The River Jordan depression, part of the Great Rift Valley system, runs southwards from Lake Tiberias into the Dead Sea, continuing south as the Wadi Araba depression into the Gulf of Aqaba. The rifted sides of the depression rise to a height of 4,000 feet in places, and mark off the highland or plateau -the main settled area in TransJordan- which lie between the Jordan Valley and the desert. Finally, five-sixths of the total land area is desert, occupying the whole of the eastern and southernmost areas of the country (Naval Intelligence Division 1943:403).

The Cultivable and Desert zones

Superimposed on this simple pattern is the sharp distinction that can be made between the cultivable zone and the desert, although the eastern boundary between the two areas has shifted over time. Even so, the cultivable zone has always been centred in the north-west of the country, and resembles an inverted cone stretching eastwards for about 40km from the western edge of the plateau to a line marked by the Hejaz Railway. The cultivable zone extends beyond the southern extremity of the Dead Sea (see **MAP 2**). Most of this area covers the northern TransJordan plateau. In the west this is dissected by wadi gorges along the Jordan Rift valley system, but the land levels out as it slopes gently into the eastern desert.



Map 2 The cultivable zone of TransJordan

Source: modified from Naval Intelligence Division 1943

At the beginning of the Mandate period approximately 3-5% of TransJordan's 90,000 sq km was under cultivation, all within the north-western part of the country. Another 5%, mainly in the south, was considered to be cultivable with the remainder as desert. The desert areas are characterised by arid or semi-arid and lightly-vegetated steppe-land, though in some areas, south of the Jebel Druze, and to the north-east of Ma'an, there are tracts of lava or basalt rock with little vegetation cover.

There are also important wadi systems, within the desert area, notably the el-Jafr depression east of Ma'an, and the Wadi Sirhan bordering on the Nejd and the Hejaz. These two, plus small systems in the north have enough water and grazing to sustain nomadic communities with their herds of camels, sheep and goats. Although the annual rainfall in the desert areas is less than 100mm, this is enough to produce 'flowering annuals and grasses' over much of it, and there is permanent vegetation along wadi floors. Thus, much of the TransJordan desert is not the arid, unvegetated wilderness characterised by other parts of the Arabian peninsula [**1**].

Climate and Rainfall

Climate is the major influence on the location and the amount of land that can be cultivated in TransJordan and on its desert areas. The climate is relatively Mediterranean in character, grading into arid Mediterranean and desert types further to the east and in the south. In the cultivable zone there is a wet winter season from October to March, followed by a dry, hot season from April to September, though rain can still fall into early May. Three phases have been discerned in the rainfall season: the early rains of October and November, the seasonal rain from December to February, and the spring rains from March into late April and early May. On average, the most intense periods of precipitation take place in December and January (Saleh 1991:22-23).

However, amounts can vary greatly from year to year, making reliable harvests difficult. The average rainfall in the cultivable zone is 360mm per annum, while 200mm is considered to mark the lowest amount below which sedentary agriculture cannot be sustained (Ionides 1939:6; Aresvik 1976:19).

There are, of course, regional variations to this rainfall pattern. In the north, along the watershed of the Wadi Ziqlab, December and January are the peak periods of precipitation. Here, the rain often falls in torrential bursts, and 80% often occurs within a 30-40 day period (Fisher et al, 1966:13-14). In the southern highlands, around Tafila and Shobek, February is the month of the greatest rainfall intensity, again with torrential bursts the norm. Here, up to one-third or more of the annual total has been known to fall on a single day. Ma'an experiences its most intense rainfall period in January (Willimott et al, 1964:27-29). Not all precipitation falls in torrential

bursts, however. For example, it was noted by one visitor to the villages between Ajlun and Salt, that rainfall there was 'relatively gentle' (Johnson 1954:1).

Even so, because of the topographical variations and the long hours of hot sunshine, much of TransJordan's limited rainfall is not fully absorbed into the soil. Much is lost as run-off after the torrential storms, or evaporates from the bare soil it falls on, and so does not benefit water supplies, the vegetation cover, or farming.

Drainage

The drainage of TransJordan flows both east and west. The longer wadi s flow eastwards with the slope of the northern plateau, but on the western escarpment, the wadi s -often the better rain-fed ones- drain into the River Jordan. Further south the escarpment wadi s, like the Mojib and others drain into the Dead Sea or the Wadi Araba.

In the Mandate period, wadi flows provided only limited support for sedentary agriculture, which continued to rely on rainfall. Though a considerable amount of water flows into the Jordan Valley, its extremely low altitude has created a humid zone which for many years was infested with malarial-breeding mosquitoes. Despite the existence of a perennial river the valley was unsuitable for permanent habitation. As a result little of it was developed for irrigated agriculture until after the Mandate period.

Evapotranspiration

In addition to TransJordan's vulnerability to fluctuations in the annual rate of precipitation, the successful completion of the agricultural cycle can be threatened by high rates of evapotranspiration, dessicating winds, and the resulting soil erosion. For most of the year, the high temperatures mean that rates of evapotranspiration exceed the amount of precipitation. This, in turn, rapidly depletes the moisture content of the soil, drying and powdering it, and making it vulnerable to the eroding and transporting effects of strong easterly winds (Willimott et al, 1964:31) **[2]**.

The impact of wind erosion of soil is at its worst when the soil has least moisture, and where poor farming techniques have weakened the soil's ability to retain moisture. Although the high-moisture retaining *terra rossa* soils predominate in the farming areas of northern TransJordan, there are many areas of poorer soils which have much poorer moisture regimes. Even in the fertile Belqa district, for example, there are areas where the instability of the soil is conducive to high rates of run-off and therefore of erosion. These conditions were found in the vicinity of the Wadi Shoeib and Wadi Kufrein in the 1960s (Atkinson, et al, 1967:29).

Farmers have developed tillage and cropping techniques to help soils retain their moisture, including the removal of weeds that are wasteful absorbers of moisture, and in the choice of crops needing less water(AbuJaber 1989:52; Palmer, nd:50). These practices were common in TransJordan from at least the late Ottoman period if not earlier. But much land use was based on inappropriate techniques such as extensive ploughing which weakens the soil structure, increasing evaporation and making the soil vulnerable to erosion.

Crops

Notwithstanding the obstacles to agriculture that have been mentioned above, the sedentary cultivators on the plateau have traditionally grown a variety of crops. Grains, particularly wheat and barley, pulses, vetches and fruits have tended to dominate There are reasons why these crops, rather than, say, cash crops like cotton, have prevailed over time. These crops respond well to Jordan's environmental constraints; the grains have been providers of the country's staple diet of bread; and in good years there has been a surplus of grains and fruits that found ready export markets in the region.

Where the soil is of poor quality, or where the terrain is characterised by rugged slopes, olive and fruit-bearing orchards replace grain crops. In the Jordan Valley, citrus, fruit and vegetable production is now widespread in the moist and humid conditions, although this was an unhealthy climate for settlement in the past so that little of the Valley was used in the Mandate period.

Other Resources

TransJordan's water deficit has not been compensated for by an abundance of other resources, such as oil, minerals or timber. In fact, some of these resources do exist in small quantities and were commercially exploited in the past, though in the case of timber such exploitation was at the expense of TransJordan's limited forest reserves (see Chapter 5).

Minerals were exploited to a degree during the Mandate period, but mostly in small quantities for domestic markets, or for Palestine.Non-metallic minerals consisted of rich deposits of phosphates, and of potash and bromine in the Dead Sea, while salt was exploited at Azraq. Deposits of petroleum were also known to exist in the Dead Sea area but were not exploited during the Mandate period (Dr.A.Lohnberg, 'Second Report on the Development of TransJordan Minerals', February 10th 1942, FO 922/156; Konikoff 1946:54-59; Quennell 1952:110-114).

2. Human Geography

Population, Size and Character

The population of TransJordan at the beginning of the Mandate period was estimated at 225,000. Just over half of this total were classified as sedentary agriculturalists or townspeople, the remainder being classified as nomads or semi-nomads (Gubser 1983:12; Wilson 1987:55-56). These figures do not include the sparsely populated, southernmost district of Ma'an, which was not formally incorporated into TransJordan until 1925.

This probably represented an increase compared to the 19th century, in view of the general expansion of the population which took place in the Middle East throughout the century, and was a consequence of many factors, such as the abatement of plague and war.

TransJordan's population was of mixed origins but with Arab Muslims making up more than 80% of the total population. These formed several sub-groups.

The largest sub-group, found in all parts of the country, was comprised of people native to TransJordan, whether they were sedentary farmers or desert-based tribes. There is little doubt that the native population was affected by regular migrations to and from Palestine and southern Syria, at a time when there was no political-territorial distinction to be made between these areas. Though these migrations undoubtedly took place, it is not known precisely when they happened, or how many people were involved. Similar caution should be given to the impact on TransJordan of the migrations which took place out of the Arabian peninsula between the 15th and 19th centuries, as recorded by Peake (1958:3) [3].

There were two minor sub-groups of Arab Muslims. One was a group of Egyptian farmers who settled in the village of Sahab, south-east of Amman, around 1894. The Egyptians were originally agriculturalists from Zaqaziq, and left Egypt in the late 1860s rather than be forced to work on the construction of the Suez Canal. They migrated first to Palestine; thereafter a few families were resident in villages in the Belqa, before joining together to form the village at Sahab (AbuJaber 1989:231-240).

The other group made their appearance some time before or during the First World War. T.E.Lawrence (1962:482) discovered at Rashadiya, south of Tafila,'a colony of freebooting Senussi from North Africa who had been introduced into some rich, but half-derelict plough-land'. (Lawrence 1962:509).

Of the non-Arab Muslim groups, the largest were the Caucasian groups. The Circassians, originally from the Black Sea area, and the Chechen, originally from Daghestan in the eastern Caucasus.

The Circassians were the first to be settled, in Amman in 1878. Others settled in Wadi es Sir in 1880, Jerash in 1884, and Na'ur in 1901. A combined group of Circassian and Chechen immigrants settled the villages of Zarqa in 1902, Sweileh in 1906, and Roseifa before 1904. The Chechen settled in Sukhne before 1904, and some went to Azraq in the early 1930s (Lewis 1987:115-117).

The settlement of Circassians was part of a deliberate strategy by the Ottoman authorities to populate areas like TransJordan with groups who would farm the land and prove loyal to the Imperial state. It was part of the process whereby TransJordan was reincorporated into the Imperial system through the bureaucratization of the land regime. Special incentives were offered to the Circassians to get them to settle in TransJordan. The land was given to them free of charge, they were exempted from taxes for the first ten years of settlement, and they were excused from military conscription.

The advantageous treatment the Circassians received, the language difficulties, and the fact that the Bani Sakhr laid claim to the land the Circassians settled, undoubtedly strained relations between the local tribes and the Circassians in the early years after their arrival. Yet this settlement strategy was a shrewd manoeuvre by the Ottoman authorities in that it encouraged the tribes to register their land, or risk losing it to outsiders (Rogan 1991:116-117).

By the First World War there were approximately 3,000 Caucasians in TransJordan. This figure rose to a peak of approximately 6,000 in the Mandate period, but a low birth-rate and out-migration meant that by the late 1940s, at the end of the Mandate, this section of TransJordan's population was in decline.

The smallest group of non-Arab Muslims were Turcomen, who originated in Anatolia and were settled in the village of Ruman near Jerash in 1884 and formally settled their land in early 1886. They were given the land free, but no usufruct rights were allowed for a period of ten years. Some families found conditions at Ruman difficult to cope with, and moved to other villages, to Lejjun north-east of Kerak, possibly also Humar or Fheis in the Belqa (Rogan 1991:124-126).

The largest group of non-Muslim Arab groups in TransJordan were the Arab Christians. They were predominantly settled farmers and townspeople who had been based in towns like Kerak for many years. Descended from Arabs converted in the

late Roman period, eventually practising either the Greek Orthodox or Roman Catholic rites, some had affiliated with local tribes and taken up the nomadic way of life.

The Christian groups in Kerak also became part of the Ottoman re-settlement strategy in the Belqa district in the late 19th century. In the late 1870s, poor harvests and conflict with the locally powerful al-Majali tribe led to pressure building up for the Christians to leave the Kerak area and settle at Madeba in 1880. Once again, the failure by the Bani Sakhr to register their land had resulted in it being given to others, although in this case the Christians did not receive the same range of privileges offered by the Ottoman authorities to the Circassians and to the Turcomen (Rogan 1991:127-134).

However, not all the Kerak Christians moved to Madeba. Those who retained some allegiance to the al-Majali were granted land to the north-east of the town, on the desert fringe, where the settlements of Hmud and Smakia were founded before the First World War. Between 1908-1958 these settlements matured into permanent villages (Lancaster & Lancaster 1989:10; Goichon 1972:367). Christians could also be found in the major towns of the country, such as Salt, Irbid, and Amman.

Of the smaller groups who lived in TransJordan, there was a Bahai community at Adasiya, in the extreme north-west of the country (Naval Intelligence Division 1943:469). Druze immigrants, originally from the Hauran or the Jebel Druze, and migrating before the Druze rebellion in Syria (1925-1927), lived at Azraq while others were dispersed in other parts of the country (Konikoff 1946:21; Patai 1958:22). Christian Armenians found their way into TransJordan towards the end of the First World War, as refugees from Turkey. T.E.Lawrence (1962:482) discovered a thousand Armenians in Tafila in January 1918, but many of these families later left the country. There was a community of 'a few hundred' in Amman during the Mandate period, mostly involved in commercial life (Anderson 1949:101)

According to one estimate (Sykes 1965:66) there were only two or three Jews living in TransJordan at the outset of the Mandate period. Kazziha (1967:41) refers to Jewish shopkeepers in Ajlun of Syrian origin, but it is not clear if these are the same Jews referred to by Sykes. It had not been uncommon for Jews to visit TransJordan, but this became increasingly hazardous for them in the Mandate period [**4**].

Lastly, there are two groups about whom least information is available. There was a group of freed slaves, possibly of African (Sudanese?) descent, living south-west of Kerak. The larger tribes, such as the Bani Sakhr and the Rwala, were known to have kept slaves until the League of Nations required the Mandated territories to observe international conventions abolishing slavery. One such ordinance was introduced into

TransJordan in 1928 (Minutes of the 13th Session of the PMC, June 12th-29th 1928, p58).

Itinerant families of Gypsies might also have been common in TransJordan, though even contemporary accounts are inexact on this. Thus, Lancaster & Lancaster (1991, np) in their recent report on the northern sector of the Kerak plain (in the vicinity of el-Qasr), refer to 'two separate groups of Romany speakers, Kurdish speakers and Turcoman speakers; they do agricultural work, tinkering and entertaining, and have Jordanian nationality'. Hamarneh (1985:68) records the existence in the late Ottoman period of itinerant traders from India who bartered carpets and cloth in exchange for horses.

TransJordan's population, then, was predominantly Muslim and Arab, with Arabic as their native tongue. While there were distinct ethnic and religious groups, they were only a small proportion of the total population.

Population Growth

Estimates of the total population were derived from the assessment of how many people there were in 1921, itself only an estimate, to which were added figures on the basis of the annual number of registered births and deaths, a process which began in 1924 (see **Table 1**).

Table 1: TransJordan:Population Growth, 1921-1943

Year	Population (est.)
1921	225,000
1930	262,361
1931	267,410
1932	272,129
1933	275,675
1934	278,492
1935	282,944
1936	288,526
1937	293,680
1938	300,799
1939	309,295
1940	317,157
1941	324,958
1942	332,060
1943	340,000

(Source: Wilson 1987:54; Konikoff 1946:22)

The incremental increase in population, according to Konikoff (1946:22) was due to there being more stability in the country, and greater access to health care.

Nevertheless, the Annual Reports of the Department of Health in the period 1930-1939 estimated the population at a relatively static 300,000, in the absence of a reliable census.

In 1944, a different set of population figures, still largely estimated, were produced by the Middle East Supply Centre [MESC] in their 'Economic Survey of TransJordan' (WO 252 1166). These figures offer a breakdown of the urban population, the rural population, and the nomads thus:

Table 2: The Urban, Rural and Nomadic Population, 1942

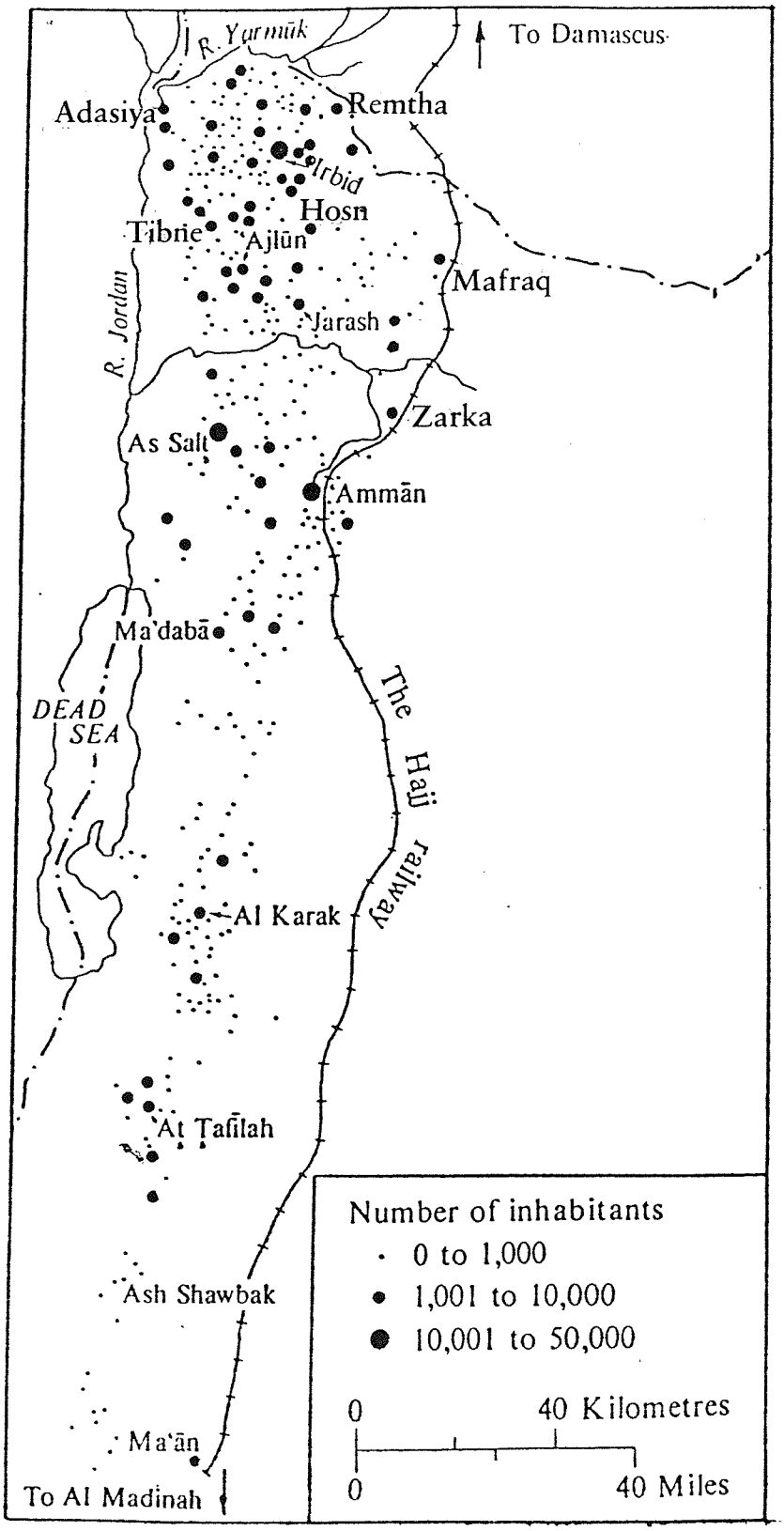
1.URBAN POPULATION:	AMMAN	32,000
	SALT	7,000
	IRBID	15,000
	KERAK	5,000
	MADEBA	5,000
	MA'AN	3,000
OTHER URBAN		16,000
TOTAL URBAN:		83,000
2.RURAL POPULATION:		267,000
3. NOMADIC POPULATION:		50,000
GRAND TOTAL:		400,000

What these figures show is the extent to which the town of Salt lost the pre-eminence it had in the late Ottoman period and failed to expand in the Mandate period in comparison with Amman which grew rapidly from a village to become the capital of TransJordan. Also, the expansion of the population in the Ajlun district due to the intensification of agricultural production, and sedentarization of tribes in the vicinity of the Hejaz Railway, can explain the growth of Irbid as an important town in the district.

The 'other urban' figures probably refer to the larger villages, such as Ajlun, Mafraq, Zarka, Tafila and Shobek. In the case of Mafraq, there was a temporary expansion of the population, mostly of construction workers during the period when the Haifa-Baghdad Road was being built. Zarka was the base of the TransJordan Frontier Force in this period.

Population: Distribution Patterns

The distribution pattern of the population conformed, by and large, to the availability of resources. Thus, the majority of the population lived in the cultivated zone of the north-west, while other pockets could be found in the better soil areas around Tafila, of Shobek and Ma'an to the south, and also in Aqaba where, apart from fishing, small-scale farming was practiced (Wilson 1987:57). (**Map 3**).



Map 3 TransJordan: Distribution of settled population 1948

Source: Norman Lewis

At the beginning of the Mandate period, most of the sedentary population lived in villages, be they fixed dwellings or 'plantation villages' comprised of tents. There were five small towns, Salt, Irbid, Amman, Kerak, and Ma'an. These had served as garrisons for Ottoman troops, and were important market centres for local people and merchants. Only Salt was large, having been the administrative and judicial centre of the Ottoman Empire in TransJordan. It was still the most important town in TransJordan in 1921. The desert comprised easily the largest but the least populated part of the country, although most of the nomads and semi-nomads, some 50,000-100,000 at the beginning of the Mandate, lived there. There were three major tribes, measured in terms of the number of their tents and camels. The Rwala moved seasonally between Syria and the Nejd through TransJordan, their traditional grazing grounds and wells lying to the east of the Hejaz Railway. The Bani Sakhr dominated the Belqa in the west, but migrated as far north as the Jebel Druze and as far south as the Wadi Sirhan. The Howietat dominated the southern areas of TransJordan bordering on the Hejaz, and as far west as Aqaba. These were not just numerically the largest tribes. They were also great landowning and livestock-owning tribes, which gave them wealth, prestige, and political influence over other groups.

The poorer tribes were the Bani Hassan, the Sirhan, 'Adwan, Bani Hamida and Bani Atiyah. Long-term processes of inter-tribal warfare and land reform had depleted their resources, and thus also their power and social status. They had also been most affected by the land reform programme in the nineteenth century. Furthermore, the sedentarization policy of the Mandate administration, which began in the late 1920s was pushed through because of the impoverishment of these tribes. Indeed, these tribes never really recovered from this further disturbance to their lives (Rogan 1991:333). That many -for example the Bani Hassan- were sedentarized in the 1930s on land they were ill-equipped to farm, only added to their miseries in the worst years of the drought.

The concept of a tribe, however, should not just be applied to the bedouin, the camel-breeders of the desert. Tribal structures persisted in the social relations of the sedentary farming communities and influenced their decision making. Various great families, such as the al-Shraideh in the Kura district, and the al-Majali in Kerak, have retained their status to the present day.

3. The Data Base During the Mandate Period

Most of the information and data in this chapter has been derived from studies of TransJordan as they have accumulated over the years. The amount of knowledge about TransJordan that the Mandate administration had at its disposal undoubtedly

increased during the Mandate period. In the matter of statistics, for example, records were often compiled on the basis of tax receipts, this was the case with crops and livestock. However, as there were tax evasions not all these records are completely accurate. Various exemptions from customs and excise duty also meant that statistics on imports and exports were of a partial nature. Moreover, many items were not recorded on a systematic basis until the 1930s, so that one can say the data base gradually accumulated in scope and accuracy as the Mandate period wore on.

If there was one area where advances have been made that were not available in the Mandate period, it is in the scientific study of the environment, for example, of geology, soils, and the climate. Nevertheless, the Mandate administration was possessed of an impressive body of quality research. Reports by experts were regularly commissioned, initially by the Economic Committee in 1934. A report on the possibilities of irrigation was first produced in that year ('Extract from a Report by Mr Shepherd', March 1934, CO 831 33/9). R. Shepherd was the irrigation officer in the Public Works Department of the Palestine Government. A year later, F.A.Stockdale visited TransJordan and wrote a report on crops (Report by Mr F.A.Stockdale on a Visit to Palestine and TransJordan, July 29th 1935, CO 732 72/3). In the late 1930s, M.G.Ionides produced a comprehensive survey of TransJordan's water resources (1939), to which was appended a survey of the country's geological and mineral resources by Dr Blake.

After the creation of the Middle East Supply Centre in Cairo in 1941, a new series of reports was commissioned, which looked at TransJordan with regard to its forestry, livestock, minerals, and motor vehicles.

Apart from these reports, commissioned from experts in their field, Government departments compiled their own records. To the records already mentioned above should be added the Annual Reports of the Department of Health. These contain a broad range of statistics on the health of the population which are more detailed than the relevant sections in the annual reports.

CONCLUSION

TransJordan's physical geography is notable for its resource deficits, and of these, water has been the most critical. In spite of these deficits, sedentary agriculture has long been practised on the plateau over the millenia, while nomadic communities have practised pastoralism in the desert and on the fringes of the plateau. At various points in history the nomadic tribes had greater or lesser access to the cultivable zones of the country. The late Ottoman period, in this regard, marked the beginning of a transition toward a more intensive cultivation of the land on the plateau, stimulating the growth of towns and villages, and this reduced the availability of grazing land for the tribes on

the plateau. These two processes, of greater agricultural production and of the sedentarization of the tribes, began in the late Ottoman period c1840, and gathered pace in the Mandate period. Indeed, they comprise those aspects of social and economic modernization which were taking place before the political landscape began to change in the years after the First World War. Since the management of these long-term changes became the responsibility of the British administration after 1921, the transition from Ottoman rule to the Mandate will now be examined.

NOTES

1. In the past, wild game in the desert areas was also common, including gazelle until they were wiped out through excessive hunting. A leopard was shot in the desert in the 1930s (Betts 1986:26-30).

2. A relatively recent example of the impact of these features of the climate was made in 1960. According to Antoun (1972:6), the village of Rehaba in the Kura district 'harvested a bumper crop of wheat, but in the neighbouring village of Kufr al-Ma, the strong east winds that year resulted in half the crop being lost'.

3 Andrew Shryock (nd, 1990?) has argued that the ideological demands of tribal history can be shaped by contemporary pressures. Thus, the Palestinian origin of many of the Belqa tribes has been glossed over owing to the course of recent history, and because the 'sons of the desert' continue to view the sedentary life with disdain. It is conceivable that a similar process has obscured the truth about migrations from the Arabian peninsula, northwards into TransJordan between the 16th and 19th centuries.

4. A Jewish grain merchant who arrived in Irbid from Haifa in 1923 aroused local suspicion and was escorted out of the country (Monthly Report for December 1923, FO 371 10106). The activities of the Palestine Communist Party, many of whose activists were Jews who occasionally crossed over into TransJordan on unsuccessful 'missions', were also closely monitored by the authorities ('Communist Propaganda in TransJordan, 1929-1932' FO 816 103).

CHAPTER THREE

THE TRANSITION TO THE MANDATE

Introduction

This chapter will consider how TransJordan became a League of Nations Mandate, and a part of the Britain's informal empire. TransJordan, as a strategic asset to Britain in the Middle East, was not important prior to the outbreak of the First World War. Nevertheless, once War broke out in 1914, Palestine, TransJordan and Iraq all became of strategic importance to Britain in its efforts to maintain the security of its imperial route to India.

1. British Policy Orientations in the Middle East, 1798-1914

British interests in the Middle East in the modern era between 1798 and 1947 were shaped by the importance of India in imperial affairs. Napoleon's occupation of Egypt in 1798 exposed to view the problems Britain would have to surmount if its trade, communications and supply routes for the administration of India were to be secure.

Britain required secure access to the land and sea routes which passed through the eastern Mediterranean, the Red Sea and the Persian Gulf *en route* to India. Initially, these areas were important as staging posts, but in time they increasingly interested Britain as areas in their own right. This was particularly true of Egypt, Iran and Mesopotamia.

A change in the emphasis of policy took place in the period following the opening of the Suez Canal in 1869. This event and the development in the 1880s of faster and more efficient shipping, increased the importance to Britain of those parts of the Ottoman realm south of the Dardanelles. With this new geographical orientation there emerged in the Foreign and India Offices a more 'Arabist', and more interventionist orientation to policy.

This entailed the use of inducements -usually financial- to the tribal sheikhs and leaders of communities in Arabia, designed to weaken their relations with the Ottoman Empire, and at the very least, to persuade them to adopt a position of neutrality. Initially, the cultivation of better relations with these Arabs was aimed at gaining secure access to certain points on the Arabian coast, but in the long term, it became part of a broader anti-Ottoman policy which Britain evolved during the First World War (Brown 1990:25-30).

As a result, by the time that war had begun in 1914, Egypt, Iran and Mesopotamia were already of intrinsic economic importance to Britain, as well as being stages on the route to India. In particular, the conversion of the Royal Navy fleet from coal to

oil from 1908 onwards increased the importance of Iran with its vast oil deposits (Marian Kent, 'Constantinople and Asiatic Turkey 1905-1914', in Hinsley 1977:163). Moreover, in Mesopotamia, British trade increased in value from £51,000 in 1868-70 to £1.1 million between 1879-99, and to £3 million in 1908-1909. By 1909 total Gulf trade was worth £9.6 million to Britain (Farouk-Sluglett & Sluglett 1990:7).

At this stage, TransJordan was of little direct interest to Britain either for trade or for strategy. Some British-made agricultural machinery had been imported, as had Manchester cotton. But TransJordan, if it figured in the British imperial mind, was a vaguely defined area in the hinterlands of Palestine and Syria.

While the British were active against the Turks in some areas, in other, more sensitive areas, a strict neutrality was observed. This was true of Britain's early dealings with Hussein ibn Ali, the Hashemite ruler of the Hejaz and thus, of Islam's two holy cities of Mecca and Madina. In late 1913 and early 1914, there was concern in the Hejaz that the Ottoman Empire was preparing to take central control of Mecca and Madina, thereby undermining the powers of the Hashemites who ruled there. As a result, the second son of Hussein, Abdullah, acting as his father's foreign emissary, met in Cairo with the High Commissioner of Egypt, Lord Kitchener in February 1914, to sound him out as to whether or not Britain would support the Hashemites in the event of an Ottoman takeover in the Hejaz.

Kitchener refused to be drawn on what he considered to be an internal matter for the Ottomans, and one where Britain wished to remain neutral. Nevertheless, the approach made by the Hashemites was noted for future use (Abdullah 1951:103-107; Holt 1966:264). Thus, it was only after the War began in 1914, and when the Ottoman Empire had sided with Germany, that Britain felt free to pursue a more aggressive anti-Ottoman policy in that part of the Middle East.

2 Britain's Wartime Agreements in the Region, 1915-1918

Britain's decisive role in shaping the Middle East after the collapse of the Ottoman Empire in 1918 was prefigured in a variety of agreements and statements that were made throughout the course of the War. Most of the agreements were made in secret with those parties, such as France, Germany and Italy, who claimed an interest in the eastern Mediterranean and were opposed to the German-Ottoman alliance of 1914.

Britain's war aims in the Middle East were clarified in 1915 by the report of the De Bunsen Committee into 'British Desiderata in Turkey-in-Asia' which established a precedent for the Anglo-French partition of the Ottoman Empire which followed the War (Klieman 1970:4-7). This clarification was taken two stages further by the 1915-1916 agreement with the Hashemites to grant the Arabs their independence in

exchange for their help in the military campaign against Ottoman forces; and by the Sykes-Picot agreement of May 1916 whereby Britain and France, acting ostensibly to guarantee Arab independence from Turkish rule, effectively agreed to partition the Ottoman Empire between themselves (Yapp 1987:275-288).

Aside from these two agreements, the British also committed themselves to establishing in Palestine a 'national home' for the Jewish people. This commitment was embodied in the 'Balfour Declaration' of November 1917 (Mallison & Mallison 1986:47). But while some commentators, notably Baram (1978:36) have argued that the Declaration was issued to rally Jews in Russia, Germany and North America to the allied cause, Levene (1992:76-77) has argued that Zionism was not in a position to claim any legitimacy as the sole opinion of world Jewry, and that the Balfour Declaration was produced in an attempt to solve the 'Jewish question' in Europe.

Depending on how the vague language and imprecise maps associated with these statements and agreements were interpreted, portions of the future TransJordan appeared to lie within British, French, or Arab territory. At the Paris Peace Conferences in 1919,the Zionist leader Chaim Weizmann proposed boundaries for Palestine which extended as far north as the Litani River in Lebanon, as far east as the Hejaz Railway, and as far south as the Gulf of Aqaba, but these proposals were rejected (Flapan 1987:16). Under these proposals, all of TransJordan's cultivable zone would have fallen within Palestine.

Thus, in the course of the First World War, Britain entered into a number of agreements with its allies which traded territory in return for military support against Germany and its Ottoman ally, or recognized existing or aspirant claims to Ottoman territory, both by the French and the Zionists. It never ceased proclaiming its support for Arab independence, but just as the means of delivering these promises was vague, so too was the wording which accompanied the description of the territorial divisions that were envisaged. None of the agreements appeared to be so specific that they could not be interpreted in contradictory ways [**1**].

3. The League of Nations and the Creation of TransJordan, 1918-1921

The Mandates

The wartime agreements and pledges emerged after 1918 in a modified form. The modifications took place both as a result of the need to try to reconcile one agreement against another, and as a result of the USA's entry into the War in April 1917, and its promotion of the League of Nations as a new international organization. The League was formed to replace the old European Imperialist system with an international

organization that was expected to be based on the principles of national self-determination, open diplomacy, and free trade (Schulz 1972:82-84). In fact, because the USA did not join the League, Britain and France were able to reassert the colonial nature of their rule in the territories of the defeated powers in Africa and Asia, albeit in a form modified to suit the League. This form was the Mandates system, which envisioned the undeveloped, or partially developed, territories of the defeated powers being administered in tutelary form by developed states, until such time as they could, in the words of the League Covenant, 'stand by themselves under the strenuous conditions of the modern world' (Article 22 [1] of the Covenant of the League of Nations, in Northedge 1988:325).

The territories of the defeated powers were divided into 'A', 'B' and 'C' class Mandates. The 'A' Mandates were comprised of the Arab territories of the ex-Ottoman Empire: Syria (including Lebanon), Palestine, Iraq and TransJordan **[2]**. They were considered to be sufficiently advanced to require only a temporary form of tutelage, even though no evidence was shown to prove how advanced these territories were, and even though no timetable was drawn up to show how long this temporary tutelage would last.

However, unlike the newly independent states of central, eastern and south-eastern Europe, the Arabs were denied their independence.There was a hint of racial prejudice in these decisions, in addition to the imperatives of the imperial interest. Mansfield (1991:100) has argued that British officials were influenced by the views of the former Governor of Egypt, Lord Cromer, who believed that the British were a 'Governing peoples', while the Arabs were, by nature, a 'subject peoples'. This denial of self-determination was evidently political, as two international lawyers put it, 'In the political conditions which existed at the inauguration of the League of Nations, membership was looked on as a privilege not to be showered on states indiscriminately or to be hawked about with importunity in the couloirs of diplomacy' (Butler & Maccoby 1928:534).

The Occupied Enemy Territory Administrations, 1918-1920

At the end of the War, and as an interim measure pending the decisions of the peace conferences in Paris, military rule was set up in the defeated territories of the old Ottoman Empire. British forces in the Levant under General Allenby established three Occupied Enemy Territory Administrations (OETA). These were: OETA-West, covering the coastal areas of Syria (Lebanon); OETA-East, covering Syria as far south as, and including, TransJordan; and OETA-South, covering Palestine. The OETAs continued to function until an agreement was made between Britain and France that British troops evacuate Syria on November 1st 1919. When this evacuation occurred and the OETA-East ceased to function, the Syrians attempted to

establish an independent government in Damascus. A 'General Syrian Congress' was created in Damascus, Syrian independence was declared, and Feisal -Hussein ibn Ali's third son and military commander of the Arab Revolt -was nominated as the King of Syria. The Syrians considered their new Kingdom to include TransJordan as far south as Ma'an.

San Remo and the French Occupation of Syria, 1920

The response of France and Britain to these developments in Syria was to press ahead with their original intention to partition the territories of the Ottoman Empire. Using the framework of the new Mandates system, Britain and France proceeded to implement the 'Sykes-Picot' agreement. The territorial division envisaged in this agreement was put into practice at the Conference of the Allied Powers at San Remo in April 1920, an extension of the Paris Peace process.

The Conference formalized the Mandates in order to present a direct challenge to the Arabs' actions. France issued an ultimatum to Feisal to demobilize the Arab army in Damascus, to dismiss the Government, and to recognize the authority of the French Mandate. With troops advancing on the capital, Feisal conceded to the French demands on July 20th 1920, and French troops occupied Damascus five days later (Khoury 1987:41).

Britain's Occupation of TransJordan, 1920-1921

France's occupation of Syria aroused the anxieties of the British on two fronts. With regard to 'Sykes-Picot' and its imprecise delineation of the zones of French and British control, there was the fear that the French would occupy as much territory south of Damascus as they could. On another front, the Hashemites had been left with nothing to show for their commitment to the War, in spite of British promises. Within a year there had been a convergence of these two issues: Britain moved into TransJordan, and took the opportunity presented there to settle the claims of the Hashemites.

In August 1920, the High Commissioner of Palestine, Sir Herbert Samuel, went to Salt and declared that the British Government proposed to supervise the creation of 'local self-government' in TransJordan. Following this declaration, individual British military officers were posted to Salt, Amman, Irbid, Jerash and Kerak to support British intentions. Most of the 'local self-governments' that were then set up by the British officers were in the north-west (Abu Nowar 1989:24). The British Military Officers were also posted to TransJordan in order to deter any French expansion south of the Yarmouk River.

Although the 'local self-governments' could rely on the support of people in the immediate locality, there was no unified authority to coordinate the work of these local governments. Nor was the small reserve force sufficient to maintain public order.

The weakness of the local self-governments, and of Britain's presence in TransJordan was soon evident to the population. Some of the Arabs who refused to recognize Samuel's authority, sent a message to Hussein ibn Ali, asking him to send them one of his sons to TransJordan, and re-establish order there (Brunton to Chief Secretary [Jerusalem], August 31st 1920, SAC/Brunton Papers; Kazziha 1967:50). At about the same time that this plea was sent, Abdullah, vowing to regain Syria for the Hashemites, set out from Mecca with an armed body of 500-1,000 men, reaching Ma'an in November 1920, and Amman in February 1921.

Whether or not Abdullah's campaign against the French would have had any realistic chance of success, this new development, combined with the unrest in Iraq, where there had been an insurrection in 1920 gave Britain its opportunity to meet its commitments to the Hashemites, and bring greater stability to TransJordan and Iraq.

The Cairo Conference 1921

These commitments were dealt with at the Cairo Conference in March 1921, and at the talks in Jerusalem which followed later that month. The Cairo Conference was attended by the principal political and military officers in Palestine and Iraq, by British officials resident in Egypt, and by officials from the Colonial Office. They were chaired by the new Colonial Secretary, Winston Churchill.

The Conference established that Feisal, ousted from Syria, would become King of Iraq, subject to a referendum in that country. With regard to TransJordan, Abdullah was to be offered an Emirate in TransJordan on a six-month trial, and on condition that he would not allow TransJordan to be used as a base for anti-French activities in Syria, and for anti-Zionist activities in Palestine. Moreover, the Conference agreed that TransJordan was to be excluded from the terms of the Balfour Declaration. These conditions were the substance of the negotiations between Churchill and Abdullah in Jerusalem after the Conference (Kazziha 1979:255, n1; Wilson 1987:53).

The Conference also decided that the Royal Air Force would be Britain's principal military service in the region. This suited the British Treasury, which had called for stringent economies to be made in Britain's military budget. Air power was seen as a relatively inexpensive military device, ideally suited to the desert conditions found in large areas of Palestine, TransJordan and Iraq (Towle 1989:13-24). The postwar settlement also looked to the creation of a trans-desert railway from Haifa to Baghdad

through the zones of British control ('Sykes-Picot' agreement, Articles 5 and 6, [1916], in Moore 1974:26-27). An oil pipeline to run along a similar route, from Haifa to Kirkuk, was also under consideration. Thus, Britain's land, sea and air routes to the Gulf and India could be protected by the combination of air power and sympathetic governments in Cairo, Jerusalem, Amman, Baghdad and Tehran.

Conclusion

In the settlements which emerged from the end of the War through to the Cairo Conference of 1921, Britain tried to meet the obligations it had incurred during the War. It claimed that all of these commitments were honoured. The agreement with France led to the creation of the Mandated territories of Syria, Palestine, TransJordan and Iraq. The agreement with the Hashemites led to the installation of Hashemite regimes in Amman and Baghdad. The agreement with the World Zionist Congress allowed Jewish settlement activity in Palestine.

But what had also taken place in this period was the creation of the League of Nations, which in the view of one of its leading architects, the USA, was going to replace the old diplomacy with something more open and dynamic. When the League of Nations was formed, the influence of the anti-colonial views of US President Wilson threatened Britain and France's desire for the territories of the defeated powers to be handed over to them, merely as the spoils of war. But the USA's conception of a new world order did not survive the Republican victory in the Presidential election of 1920, and thereafter until 1941, the USA retreated into relative isolation [**3**]. This event enabled Britain and France to reassert their imperial interests on the international scene, albeit, 'under the surplice of Wilsonianism' (Nicolson 1964:187). In Britain the political left called the League the 'Burglar's Union' (Douglas 1985:5), and Woodrow Wilson's bitter remarks revealed how far he felt the original intentions of the League had been subverted when he said, ' "The world would say that the Great Powers first portioned out the helpless parts of the world, and then formed the League of Nations" ' (quoted in Hall 1948:117-118).

Nevertheless, even if Britain and France acquired the territories they coveted under the cloak of the Mandate system, and before the League was formally established, the new organisation did require the Mandatory powers to meet legal obligations that had not been applicable to them under the colonial system. In the early years, at least, little thought was given to the consequences of membership of the League, and its legal obligations; it was the national interest which held sway.

Thus, TransJordan became a Mandated territory of the League of Nations, but was also incorporated into the British Empire. In 1921, TransJordan was viewed as a strategic

asset on Britain's imperial route to India, and little thought was given as to how the country was to be administered on a day to day basis, quite apart from meeting the long term objective of the Covenant. How the administration was developed will be examined in the next chapter.

NOTES

1. Harold Nicolson (1964:132) described the agreements as 'an embarrassment' which restrained Britain's room for manoeuvre at Paris. Glubb (1959:79) was more scathing, arguing that 'neither Britain nor her allies were under any obligation to set up independent governments in the areas conquered by them. International law recognized the right of conquest...It is clear, therefore, that, in most cases, it was the idealism of the Western Powers which led them to issue their various declarations and thereby exposed them to a charge of treachery when they failed to put their noble protestations into execution in the peace treaties'.

2. The Class 'B' Mandates were (Mandatory powers in brackets): Tanganyka (Britain); Cameroon (Britain and France); and Ruanda-Urundi (Belgium). The Class 'C' Mandates were: South-West Africa (South Africa); New Guinea (Australia); Western Samoa (New Zealand); Nauru ('British Empire' & Australia); and the Caroline, Mariana and Marshall Islands (Japan, transferred to the USA in 1942).

3. The USA did not retreat into complete isolation from Europe. It played a leading role in the development and implementation of the 'Dawes Plan' of 1924 and the 'Young Plan' of 1930. These were schemes to provide the Europeans, Germany in particular, with short-term loans (Joll 1978:288-289).

PART TWO:

DEVELOPING AN INFRASTRUCTURE IN TRANSJORDAN, 1921-1946

CHAPTER FOUR

THE INFRASTRUCTURE OF POWER: ADMINISTRATION AND FINANCE

INTRODUCTION

For many years it was argued that the principal achievement of the British Mandate in TransJordan was the establishment of the Hashemite Emirate, and the creation of the Arab Legion (Hourani 1946:24; Lenczowski 1962:450; Vatikiotis 1967:5-7). These were events of long term significance for TransJordan, but constitute only a part of what happened in the Mandate period. This chapter will look in more detail at the formation of TransJordan's administrative institutions, such as central and local government, the military, the judiciary, and of financial institutions, and also examine the creation of TransJordan's international boundaries.

1. ADMINISTRATION

i) The Pre-Constitutional Period, 1921-1928

1921-1924

In August 1920 British Military Officers were posted to five towns in TransJordan in order to deter any possible expansion by the French south of the Yarmouk River. Through this manoeuvre Britain established its claim to TransJordan which was implicit in the Sykes-Picot agreement of 1916.

The decision to create a Hashemite Emirate in TransJordan was made at the Cairo Conference in March 1921. This Conference also created the Kingdom of Iraq and through these two decisions the British argued that they had honoured the agreements they had made with the Hashemites during the First World War.

In the meeting at Jerusalem TransJordan was offered to Abdullah on a *quid pro quo* basis. Namely, that Britain would give TransJordan political and financial support as long as Abdullah ensured that TransJordan was not used as a base for anti-French operations in Syria, and anti-Zionist operations in Palestine. Also, Churchill somewhat deceptively suggested that at a later date, the British Government might facilitate Abdullah's desire to rule in Damascus (Wilson 1987:53).

Between 1921 and 1924, the Emir Abdullah acquired a considerable degree of power in TransJordan. This was due to his pivotal role as the figurehead of an Arab government in TransJordan. his role as an arbiter of disputes between the tribes and

clans in TransJordan, and because he received the military and financial backing of the British Government.

However, as discussed below, in the period between 1921 and 1924, Abdullah did not demonstrate to the Colonial Office that he had sufficient control over the ministers in his Government. The domestic instability in the country and the lack of TransJordan's financial accountability to the Treasury in London eventually led the Colonial Office to force Abdullah to concede greater decision making powers to the office of the British Resident, and to accept the placement of more British officials in the TransJordan Government. These manoeuvres severely limited any influence that Abdullah might have wanted to exert over TransJordan's affairs. Even though he was entitled to assent or dissent to policy decisions made by British officials, he rarely did so, and it was only under the special circumstances of the drought in the early 1930s that he was involved in an initiative which had consequences for agricultural policy.

The initial intention of the Colonial Office was to establish in TransJordan a form of indirect rule. This view was expressed by Sir John Shuckbrugh, head of the Middle Eastern Department in the Colonial Office. There would be resident in Amman a political officer, the Chief British Representative [CBR], but he should not be seen to be making policy. Rather, the priority was for him to be free, when necessary, to exert sufficient power over the TransJordan Government 'to enable it to ensure the agreement of any policy', be this of domestic or foreign importance (Shuckbrugh to the War Office, March 4th 1921, CO 732/4).

It soon became clear that there were weaknesses in this arrangement. One weakness was in choosing a suitable CBR. The first, Major Albert Abramson (CBR from April to November 1921) was considered a competent administrator, but lacked the forceful personality that was considered necessary when dealing with the Emir Abdullah. His successor, Harold Philby, had a forceful personality, but because he also believed that the Arabs had been entitled to their independence after the First World War, he was not an assiduous representative of the views of the British Government. Also, he failed to compile an annual report on the administration of TransJordan for the Permanent Mandates Commission of the League of Nations, an obligation that was not in fact met until 1925.

The more serious weakness, however, lay with the conduct of the TransJordan Government. In the late Ottoman period, TransJordan had been given no opportunity to produce skilled administrators and politicians. Therefore, in the TransJordan Government that was formed in April 1921, many of the top positions were staffed by experienced Syrians. These men were embittered exiles from Damascus who had no long term commitment to TransJordan except to see it ruled from Damascus as part of

'Greater Syria'. The TransJordan Government imposed punitive rates of taxation on the population [1], and the consequence of these tax burdens, and of land squabbles, was a series of public order confrontations between 1921 and 1923.

In the Kura district of Ajlun in the north of TransJordan between 1921 and 1922, the people refused to pay their taxes and the revolt was not suppressed until the RAF bombed Tibne, the centre of the protest (Antoun 1972:19). The town of Kerak in the central-southern area of the country also refused to pay taxes in this period. In February 1922 Lt-Col Peake and the small 'Reserve Force', marched on Kerak and placed the town and neighbouring villages under a curfew until order was restored. A garrison of 60 troops was stationed in the town thereafter (Peake 1939:386).

In 1923 there was a rebellion against the Government by the Adwan tribe of the Belqa. This rebellion was the culmination over two years of grievances concerning the punitive rates of taxation, and unresolved squabbles over land. In 1921, in one of his early reports, the first CBR, Abramson, had drawn attention to the fact that in the absence of formally constituted land courts, the Emir Abdullah was personally intervening to adjudicate in land quarrels (Report no 5 by the Chief British Representative [Abramson], July 1st 1921, CO 733/4). The Adwan came to believe that in the resolution of land disputes Abdullah was favouring their rivals, the larger and more powerful Bani Sakhr. By the summer of 1923 they had lost patience with the TransJordan Government and marched on Amman. They were repulsed outside Sweileh by the Arab Legion after which the rebellion dissipated (Wilson 1987:77-78).

Apart from the Adwan's own grievances, their rebellion exposed to view a more serious problem for the TransJordan Government, namely, their lack of accountability for the disbursement of Britain's annual subsidy, the Grant-in Aid.

The freedom of action that had been given to the TransJordan Government under the Colonial Office mode of indirect rule, also reduced the amount of influence that H.M.Treasury had over TransJordan's finances. The annual Grant-in-Aid was a means whereby the British Government could ensure that the administration of TransJordan could be maintained. The Colonial Office had intended Grant-in-Aid to be an important link, politically, as well as economically, whereas in fact, in the period between 1921 and 1924, it had little practical control over how the money was spent, a situation that was viewed with alarm in H.M.Treasury.

Grant-in-Aid at this time amounted to £150,000 pa, but accounting procedures in Amman were so lax there was no proper record of how the money had been spent. Indeed, even with this subsidy, the TransJordan Government could not reconcile the costs of its administration with domestic revenue.

The cost of the administration of TransJordan was estimated to be 500% higher than in the late Ottoman period (Guckian 1985:234). Yet there was little evidence that these extra funds had been used to benefit TransJordan. Bertram Thomas, the Treasurer in Palestine seconded to Amman, posted fiercely critical reports of the TransJordan Government, and of Philby. Thomas complained that the taxes levied by TransJordan were 100% higher than under Ottoman rule, and that they were not being used for the country's benefit (Thomas, 'Financial Situation in TransJordan' April 9th 1924, CO 733/67).

By 1923 it was also clear that Samuel and the Colonial Office were unhappy with Philby's conduct in TransJordan. Shortly after taking up his post in Amman in December 1921, Philby had proposed that TransJordan be provided with a more constitutional form of rule. By this means Philby could see the two main objectives - to keep TransJordan separate from Palestine, and establish a representative form of government for the Arabs- could best be met. However, Samuel wished for more control over TransJordan to be exerted from Jerusalem, while Abdullah was opposed to any political arrangements that would diminish his authority (Kazziha 1979:252-253).

Philby's relations with Abdullah and with the officials in Amman and Jerusalem deteriorated throughout 1923. In particular, Philby had a damaging row with Abdullah over the construction of the central mosque in Amman, while Samuel became increasingly exasperated with Philby's repetitive complaints about money and the high cost of living in Amman (Monroe 1973:129-133).

In January 1924 Samuel was instructed by the Colonial Office to dismiss Philby, although earlier he had advised against this (Samuel to Shuckbrugh October 5th 1923, CO 537 860; Telegram from Colonial Office to Samuel, January 8th 1924, CO 537 861). Philby agreed to stay on until a successor could be found, but his departure came at an unfortunate time, when external pressures were adding to TransJordan's problems. In particular, Abdul Aziz ibn Saud was intensifying his campaign to replace Hussein ibn Ali as Guardian of the Holy Places at Mecca and to take over Arabia. This campaign had progressed in stages after the First World War, with ibn Saud gaining control of the Nejd and closing in on the Hejaz. In 1922 the fanatical Wahabi fighters, the 'Ikhwan' had crossed into TransJordan and reached to within 12 miles of Amman before being driven back by the RAF. Another crisis blew up in 1924. In March of that year, Hussein ibn Ali declared himself Caliph, precipitating an urgent move by ibn Saud against Mecca, and creating widespread anxiety in the Islamic world for the safety of the Holy Places.

Britain, mindful of Muslim opinion in India, refused to offer any support to Hussein. There was also concern when Abdullah left Amman for an eight-week Pilgrimage to

Mecca in February 1924, (Leatherdale 1983:37; Wilson 1987:79). The Colonial Office used this sudden hiatus in TransJordan's fragile power structure to reorganise the administration there. Philby was replaced as CBR by Lt-Col Sir Charles Henry Fortnum Cox. On his return from Mecca in April, Abdullah was presented with an ultimatum, that he either concede more of his Government's power to the Colonial Office, or he remove himself entirely from the country. It also happened that Abdullah's return from Mecca coincided with the second raid into TransJordan from the Wadi Sirhan by tribes loyal to ibn Saud. Dependent upon Britain in such a crisis, Abdullah had little choice but to capitulate to British demands. To save money and gain more financial control, the money set aside for Abdullah's personal use was slashed, the Tribal Development Department was disbanded, the Arab Legion was reduced by 200 men, and financial control handed over to Cox. At the same time the Syrian nationalists in the Government were removed from office to reduce the threat they posed to increased British control (Guckian 1985:242).

In 1924, TransJordan began to move toward more stable government, but with much more comprehensive British control. In addition to the High Commissioner, the Chief British Representative and his assistant, and the Officer Commanding the Arab Legion, Britain also appointed ex-officio members of the Government, the Judicial and Financial Advisors. Further British appointments were made to the TransJordan Government in the years after 1926, many of them officials on secondment from the Palestine Government. Thus, not only was Abdullah's freedom of manoeuvre severely curtailed by his concession to British control, but TransJordan was brought closer to the Palestine administration. With these new arrangements, it was hoped that TransJordan would experience more domestic stability and economic growth.

1924-1928

In addition to placing officials in Government departments, the Mandate administration intensified its efforts to introduce a more constitutional form of rule in TransJordan. This initially took the form of the Government publishing decrees, ordinances, and laws, and proceeding to implement them in a legal manner, through the Government Departments that were being established for these purposes. The logical extension of this process was the 1928 Agreement between the United Kingdom and TransJordan, and the Organic Law of the same year. These two instruments clarified the basis on which the TransJordan Government was to be constitutionally based.

The negotiations over constitutional rule lasted from 1924 to 1928. During this period there were three obstacles to the progress of TransJordan's administration and to its economic growth. One was the impact on TransJordan of the Druze Rebellion in Syria, between 1925 and 1927. This affected security on TransJordan's northern

boundary. Druzes refugees spilled across the border region and by early 1926 more than 1,000 were encamped at Azraq. By the end of 1926 there were more than 3,000 Druzes at Azraq, and apart from security problems with guerillas amongst them, there were also health hazards. In 1927 the TransJordan Government decided to remove the refugees back to Syria, and the TransJordan Frontier Force was deployed for this purpose. In August 1927 it was reported that the refugees had been removed from the country (Report on the Supervision of the Frontier Between Syria and TransJordan, August 5th 1927, CO 733 132/1). The Druze rebellion delayed the process of boundary delimitation between TransJordan and Syria (see section iv below).

On July 11th 1927, at about the time that Druze refugees were being repatriated to Syria, TransJordan was struck by an earthquake. The earthquake was described as being of 'moderate severity'. The affected area which straddled the River Jordan measured 70 miles east to west and 50 miles north to south. Many buildings were damaged, particularly because of their poor construction. The worst affected towns in the country were Salt (35 killed, 34 seriously wounded) and Irbid (15 killed, 20 seriously wounded) (Report on the Earthquake in TransJordan, by Professor Bailey Willis, August 21st 1927, CO 733 142/13).

The cost of the earthquake was estimated at £20,000, the sum for which H.M. Treasury agreed an 'Earthquake Relief Loan' [**2**]. While the relief fund allowed persons to claim loans of no more than £30 to be repaid over 8 years at 6% interest, those people too poor to repay their loans were helped out through public subscriptions (High Commissioner to Secretary of State, June 26th 1928, CO 831 3/5).

While the Druze Rebellion and the Earthquake of 1927 sapped TransJordan's scarce resources, after 1924, it also became evident that TransJordan had begun to experience a cycle of poor rainfall years. Although there were individual years when harvests were good, for the better part of a 12-year period between 1924 and 1936, TransJordan experienced drought conditions. These conditions played havoc with attempts to stimulate economic growth (see Chapter Six).

ii. The Constitutional Period, 1928-1946

The provision of constitutional rule embodied in the 1928 Agreement and the Organic Law was designed to give Britain more control over TransJordan's affairs. But it was also designed to meet the requirement of the League of Nations Covenant, which envisaged that at some future stage TransJordan would emerge from its Mandate as an independent state. Constitutional developments will be examined in this section.

The 1928 Agreement and the Organic Law

After Cox's appointment as CBR in 1924, a more determined effort to establish a constitutional framework for the government of TransJordan was made. This eventually resulted in the 1928 agreement and the Organic Law. However, the 1928 Agreement was imposed on TransJordan only after Abdullah's own proposals for constitutional rule had been rejected out of hand (Shwadran 1959:166-167; AbuJaber 1969:222).

The British proposals prevailed and were formalised through the 'Agreement between the United Kingdom and TransJordan' of February 28th 1928. The Organic Law came into effect on April 1st 1928. The Agreement together with the Organic Law provided for the creation of a Legislative Council that would comprise 16 elected representatives, of whom nine were to be Muslims, three Arab Christians, two Circassians, and two to represent the nomadic peoples. Six members of the Executive Council sat in the Legislative Council with ex-officio status (Naval Intelligence Division, 1943:473).

But equally as important as the creation of the Legislative Council were the many guarantees for British involvement in policy making for TransJordan. The British Government took control over TransJordan's budget proposals, and obtained an effective veto over a range of legislative issues such as the issuing of currency and the law on the Succession or Regency (Art.6). Powers were given to Britain to deploy military forces in TransJordan, and in certain circumstances, to declare martial law (Arts. 14 & 16). Britain held a veto over the granting of all concessions and foreign contracts (Art.17) and bound TransJordan to certain aspects of the Covenant of the League, committing TransJordan to honouring international treaties, and recognising the rights of foreign nationals in the country (Arts.4 and 9). The British Resident and his staff were to be paid from TransJordan Government funds (Art.1), and the British Government reserved the right to veto the appointment of any Government official who was not of TransJordan Nationality (Art.3) (all references in Hurewitz 1956:156-159).

Consequences of the 1928 Agreement

The 1928 Agreement and the degree of control over TransJordan's affairs that were granted to the UK, provoked considerable hostility in TransJordan. There were angry demonstrations in the Ajlun district, and public meetings in Amman where newly-formed political parties denounced the Mandate. An unsuccessful campaign was launched to boycott voter registration. When the first Legislative Council was elected in 1929 against this background of protest, however, it did not turn out to be the 'rubber stamp' parliament that the British had intended it to be. The first Legislative

Council sat from 1929 to 1931, when it was dissolved by the Emir because the members refused to pass the budget estimates for the financial year 1931-1932. Hostility to the Mandate administration continued in the second Legislative Council which was elected in 1931, with members adopting procedural manoeuvres to delay Council business. Abdullah dissolved the Council in 1933, and after these disruptions, the procedural rules were amended, known 'troublemakers' squeezed out of office, and in its place the compliant body which the British had wanted was formed (Situation Report for the Quarter ending March 31st 1928; Situation Report for the Quarter September 30th 1928, CO 831 1/2; Shwadran 1959:175-176; AbuJaber 1969:222-226).

Constitutional Amendments

The election of a more compliant Legislative Council allowed modifications to be made to the 1928 Agreement. In June 1934 these amounted to no more than a supplement to the Agreement which absolved the TransJordan Government of the financial responsibilities for the British Resident and his staff. In future, the cost would be included in Britain's Grant-in-Aid.

Rather more important changes were made to the Agreement in 1939. The Executive Council was replaced by a Cabinet, or Council of Ministers. Article 10 of the Agreement, which had prevented the Emir from raising his own military forces without Britain's consent, was deleted. The Emir was allowed to appoint Consuls to other Arab states, and a commitment was given by Britain to recruit Government officials from within TransJordan (where possible), rather than to second officials from the Palestine Government (Shwadran 1959:183-185).

iii. The Administration

The day-to-day administration of the Mandate in TransJordan was coordinated by the British Resident and his staff, who liaised with the staff of the TransJordan Government departments. In effect, apart from the running of the Sharia Courts, real power rested with British officials. As a system it was bureaucratic and cumbersome. The British Resident had some authority to initiate policy, but he could not do this until policy recommendations had been passed to the High Commissioner in Jerusalem, and from there to the Colonial Office in London. Furthermore, with any policy decision involving expenditures, H.M.Treasury had to be given an opportunity to have their say and, invariably, reduce any sum being requested. In any matters involving regional powers outside the Mandate area (for example, Iraq after its independence in 1932, or Saudi Arabia), Foreign Office opinion had to be canvassed.

Despite this bureaucracy, the staff under the British Resident's authority never exceeded 15. More than half were ex-officio members of the TransJordan Government

and the Legislative Council, and included the Financial Advisor, the Judicial Advisor, the Director of the Department of Development (from 1937 onwards), and the Director of Customs. These, plus the staffs of the Government departments, formed a bureaucracy which was considerably larger than anything that had been seen in TransJordan during Ottoman times. It was also more expensive to run. Even so it was not a very efficient bureaucracy and often experienced difficulties when dealing with certain instructions.

For example, it was the duty of the British Resident to supply the Colonial Office through the High Commissioner, with annual budget estimates before the end of the current financial year. It was also incumbent upon the British Resident's office to supply the Permanent Mandates Commission [PMC] of the League, with an annual report on the administration of the Mandated territory. Every year the PMC scrutinised these reports, and British officials were expected to answer questions on their contents. In fact, in the period between 1926 and 1931, the British Resident, Cox, had difficulty meeting the deadline for budget reports, and this resulted in delays of from six months to a year. Also, the administrative reports in this period, on which the reports to the League were based, were criticised for their lack of detail (Minute by Lloyd, April 20th 1929, CO 733 171/2; Report of the O'Donnell Commission [1931], CO 831 16/2). This situation improved in later years.

iv. International Boundaries

What was important to the Colonial Office was that by 1928 it had settled one of its outstanding obligations to the League, and one which it had also pursued for selfish imperial interests. This was that 'the necessary rights of authority and administration...be conferred upon the selected Mandatory powers by a legally binding act'. But in addition, the League laid down that 'the frontiers of the territories entrusted to the different Mandatory Powers must be delimited' ('The Responsibility of the League Under Article 22 of the Covenant', December 8th 1920, Assembly Document No 161). However, by 1928 not all of TransJordan's international boundaries had been delimited. These boundary making processes continued into the 1930s, and will now be considered.

One of the major spatial transformations which took place in TransJordan after 1921 was a consequence of the allocation of international boundaries. This circumscribed the space which became known as TransJordan in international law. Prior to the onset of Mandatory rule, TransJordan had been part of the Syrian provinces of the Ottoman Empire, with only vaguely defined administrative boundaries on the margins of Palestine, the Hauran, and the Hejaz, and none at all in the area east of the Hejaz Railway. The League of Nations required Britain to delimit TransJordan's boundaries,

and the process took place in the years between 1920 and 1932, with one exception. The boundary between TransJordan and the Hejaz, later Saudi Arabia, was not formally concluded until 1965 (see below).

TransJordan's boundaries were only vaguely prefigured in the wartime agreements between the allied powers which envisaged the Ottoman Empire being partitioned into zones controlled by these powers. While TransJordan had not been given any special status at that time, it nevertheless appeared from the Sykes-Picot agreement that TransJordan lay within the area of British control.

The boundary between the French and British Mandates was not formally allocated until the Franco-British Convention of December 23rd 1920. This drew the boundary line between what would become Syria and TransJordan, as a straight line running from Abu Kemal in the east to Imtan in the Jebel Druze, continuing in this westerly direction until meeting the boundary with Palestine (Text of the 1920 Convention, CMD 1195). Subsequent to this Convention, TransJordan's boundaries were settled at different times. These will now be considered.

Palestine-TransJordan

The most straightforward boundary to settle was that between Palestine and TransJordan, which was legally formalised in 1927. It was an easy boundary to settle because much of it was supplied by natural features, principally a line running through the centre of the River Jordan, the Dead Sea and the Wadi Araba into the Gulf of Aqaba. Only in the extreme north was there a deviation from this principle.

Here, the boundary line as it approached Lake Tiberias, veered to the north-east to meet the confluence of the Jordan and Yarmouk Rivers, and the triangulation point marking the Palestine-TransJordan-Syria boundary at El Hamme station [**MAP 4**]. By severing the so-called Semakh triangle which was placed in Palestine, it dealt a serious blow to TransJordan's agricultural prospects, because it made impossible the development of any large-scale irrigation scheme using the waters of Lake Tiberias, and removed overall control over the Jordan and Yarmouk Rivers from the TransJordan Government.

This boundary line was the consequence of an agreement that had been reached during the War in secret by the British Government and the Russian-Jewish engineer, Pinhas Rutenberg. This awarded Rutenberg a concession to provide Palestine (excluding Jerusalem) with electricity, for which he needed access to the Yarmouk River, and the waters of the River Jordan as they flowed from Lake Tiberias. The Concession was formally awarded, with no competitive tendering allowed, in 1921. In other words,

having first agreed to the Concession, Britain then fitted the boundaries of Palestine and TransJordan to suit the deal (Jefferies 1939:426-427; Sykes 1965:112-113).

TransJordan-Syria

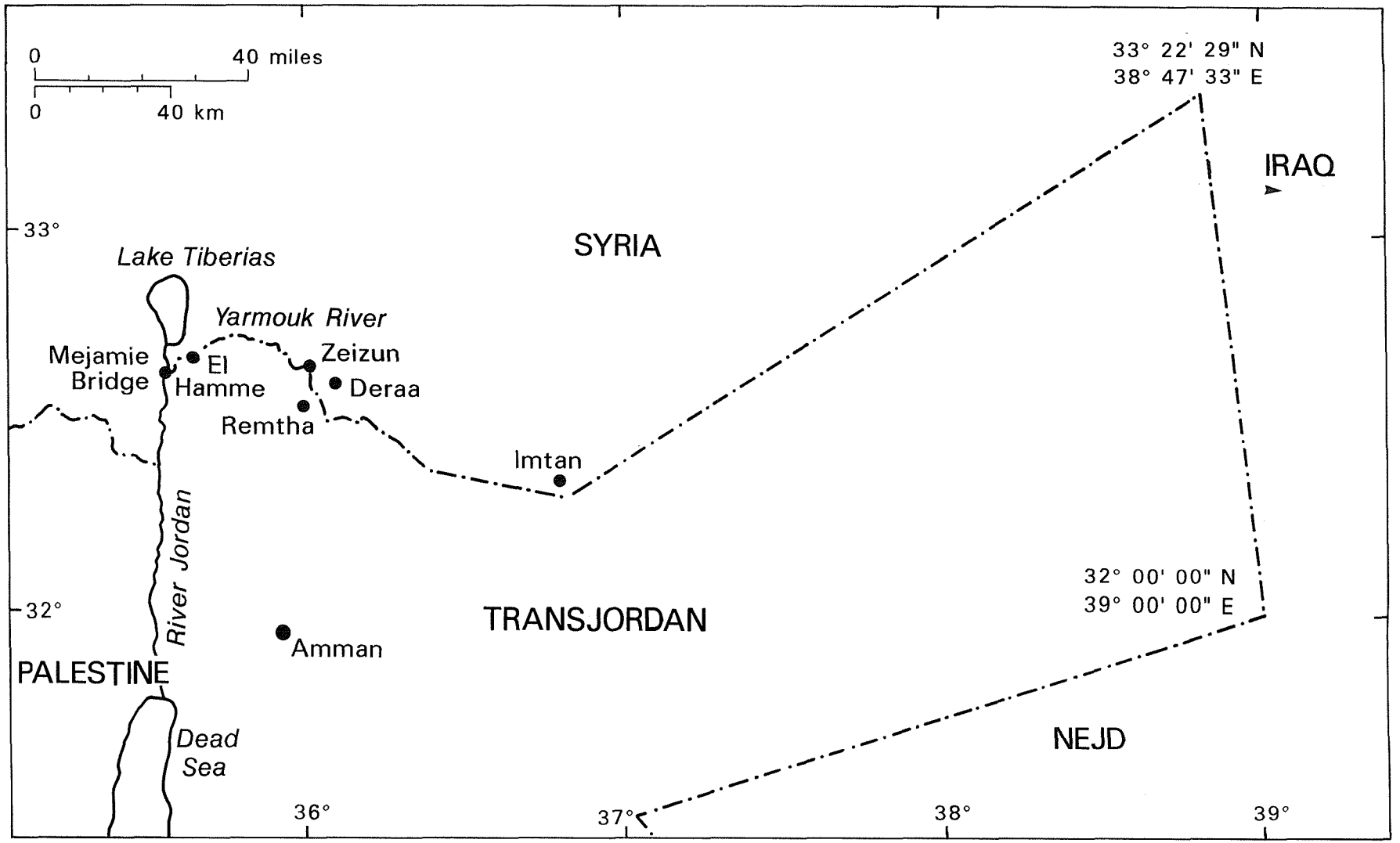
The formation of the boundary with Syria, which began with the 1920 Convention, was not finally concluded until 1932. Attempts to move the process a stage further from the boundary allocation of 1920 were delayed, first by the disturbances to public order in TransJordan between 1921 and 1924, and then by the Druze Rebellion between 1925 and 1927.

Negotiations on the TransJordan-Syria boundary took place over a period of just over a year. They began with exploratory talks in Paris in July 1930, and concluded with a formal agreement which was signed in Paris in October 1931. This agreement delimited the boundary between TransJordan and Syria, and provided for a formal demarcation, which took place along the boundary zone in the summer of 1932. In fact, the boundary followed closely the 1920 Convention, except for modifications in the area south of the Jebel Druze, and in the west in the Yarmouk Valley (Lord Tyrrell to Aristide Briand, October 31st 1931, CO 732 50/2; Report of the Boundary Commission by Alec Kirkbride, enclosed with Despatch from British Resident to High Commissioner, July 14th 1932, CO 732 54/2; Kirkbride 1956:82-90).**[MAP 4].**

TransJordan-Iraq, TransJordan-Nejd

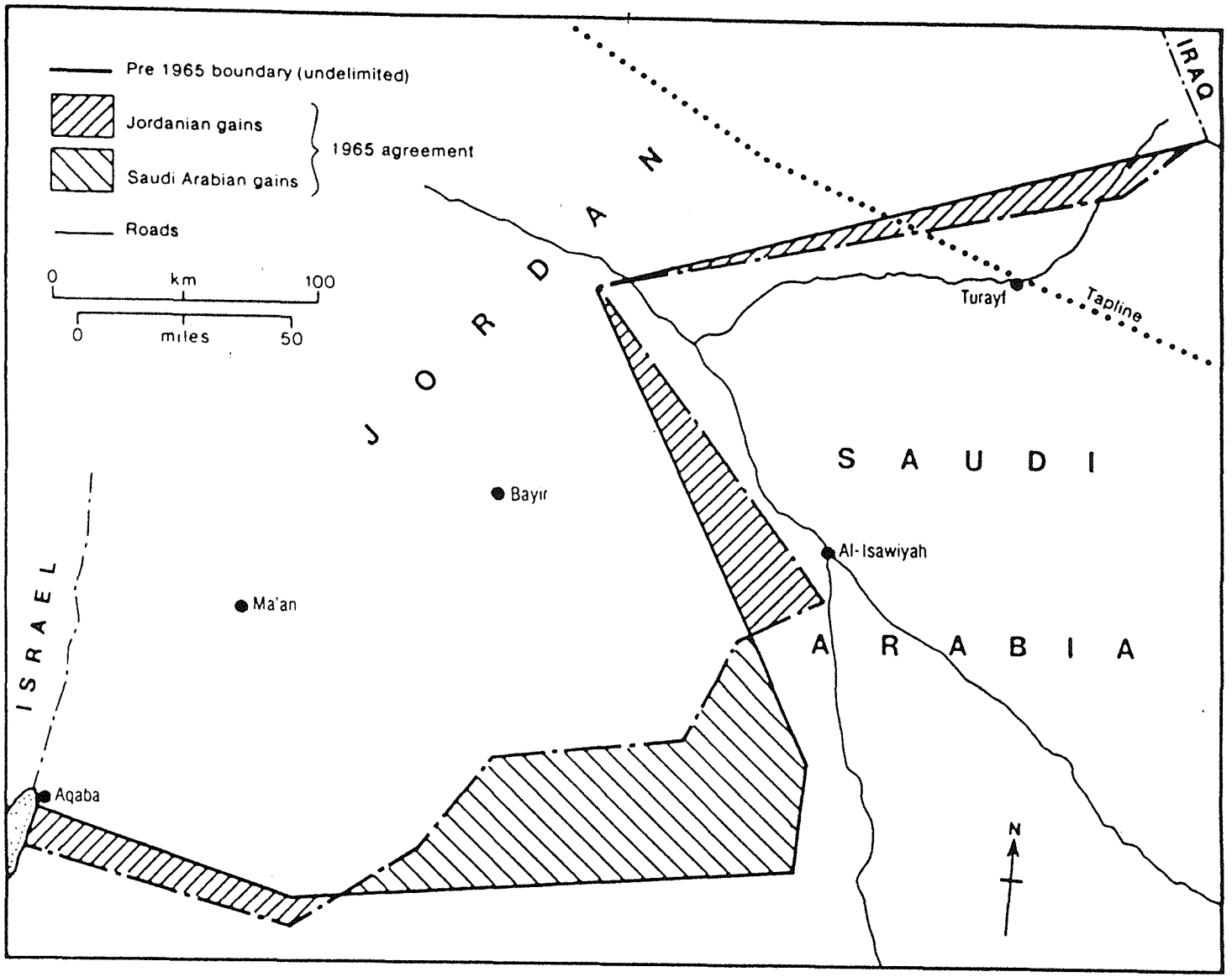
TransJordan's boundary with Iraq was formed in part from the boundary with Syria, and in part from the boundary between TransJordan and Iraq and the Nejd. The boundary agreement was concluded in 1932 through an exchange of letters between the Chief Minister of TransJordan and the Prime Minister of Iraq, even though neither of these officials were actually involved in the delimitation process of the boundaries.

The TransJordan-Iraq boundary extended from a point just south of Jebel Tenf, which marked the triangulation point of the TransJordan-Syria-Iraq boundary, south to a point north east of the coordinates 32 degrees north and 39 degrees east, which marked the triangulation point of the TransJordan-Iraq-Nejd boundary (Appendix, Annual Report 1932). **[MAP 4].**



Map 4 TransJordan boundaries with Palestine, Syria and Iraq

Source: modified from Bureau of Intelligence and Research 1969 and 1970



Map 5 The TransJordan-Saudi Arabia Boundary

Source: Drysdale and Blake

TransJordan-Hejaz

The southernmost boundary zone of TransJordan with the Hejaz proved to be the most intractable of TransJordan's boundary problems, and was not formally settled until 1965 (**3**). The central reason for this was ibn Saud's refusal to recognize TransJordan's jurisdiction over Ma'an and Aqaba. This district had been *de facto* incorporated into TransJordan since the onset of the Mandate, but the district was not formally annexed to TransJordan until July 1925. Britain had no intention of allowing ibn Saud any jurisdiction over the southern district of TransJordan because Aqaba was TransJordan's only outlet to the sea. Also, there was concern that the close proximity to Palestine of the 'fanatical Wahabi' tribesmen would involve the British in more intensive, and therefore, costly policing of the area (Leatherdale 1983:46-50; Silverfarb 1982:277).

Following his occupation of the Hejaz, Britain moved to re-establish what had become a strained relationship with ibn Saud. A draft treaty was submitted to him in 1926 but ibn Saud refused to recognize Britain's status as the Mandatory power for Palestine, Iraq and TransJordan, and he also refused to recognize Britain's jurisdiction over Ma'an and Aqaba.

Gilbert Clayton made a fresh attempt to reach an agreement in 1927, but found that ibn Saud would not move on either TransJordan's borders nor on the Mandates. Ibn Saud argued that the Mandates amounted to a betrayal of Britain's promises to the Arabs, and that he could not support them. He also considered Ma'an and Aqaba to be an integral part of the Hejaz, and could not be seen to surrender the Holy Places of Islam (or any part thereof) to a Christian state. The only means left to Clayton was to persuade ibn Saud to recognize the status quo in Ma'an and Aqaba. The Treaty of Jeddah, which contained this formal recognition of the status quo, was signed on May 20th 1927 (Silverfarb 1982:278-279). **[Map 5].**

The process of boundary formation took place for a variety of reasons, yet together they helped to provide TransJordan with a fundamental element of statehood, namely a territory with demarcated boundaries. It was an example of how Britain met its responsibilities to the League, and also an example of how free Britain was to pursue such interests by shaping these boundaries to meet its own imperial interests.

On another level, however, international boundaries were completely meaningless in those areas where desert-based tribes moved on a seasonal basis in search of water and grazing land, and to undertake time-honoured trading practices. The boundaries in the desert area were porous, and in the case of smuggling, difficult to police. Nevertheless, over time they did affect the spatial movements of the tribes of TransJordan. Ibn Saud used the boundaries to impose the alms tax (*'zakat'*) on tribes entering his domain (Tell 1991:8-9), and this act, plus the similar difficulties encountered when tribes

entered Syria, tended to curtail tribal movements. As a result, nomads that had once ranged more freely in the region focused their movements more exclusively on TransJordan than before. This also exacerbated overgrazing in parts of TransJordan during the drought years. This contraction of space at the political, economic and social level enabled the emerging state in TransJordan to acquire fuller control of the territory of TransJordan and its population than had been possible under Ottoman rule.

v) District Boundaries and Local Government

While TransJordan's international boundaries circumscribed the space within which the Mandate was to be administered, there were further internal divisions of territory for the purposes of local government. These developments will be examined in this section.

The Late Ottoman Period

In the late Ottoman period, there had been numerous fluctuations in the administrative boundaries within TransJordan. But each administrative area was large and extended beyond the territory that would later become TransJordan. When Salt came under military occupation in 1867, the Ottoman authorities incorporated it into the Mutasariffiya of al-Belqa. This ran as far south as Kerak, and included Nablus on the west bank (Rogan 1991:87).

Up until 1888, the Sanjak of Nablus included Ma'an, but changes in that year severed the east from the west bank. This brought the northern districts of TransJordan under the control of Damascus (McCarthy 1990:5; Rogan 1991:155). In order to incorporate Kerak more closely into the Empire in 1893, the Ottomans created the Sanjak of Kerak which extended as far south as Meda'in Salih in the Hejaz. By 1904, the Gulf of Aqaba was part of the Vilayet of Hejaz, and there was a further change in 1910 when Aqaba formed a part of the Sanjak of Madina (Annual Report 1935:281-282).

The Mandate Period

The Mandate Administration largely retained the geographical structure and nomenclature of the Ottoman system, but the size of the administrative districts was reduced. The principal mechanism for the organisation of local government was the General Administration of Vilayets (Amendment) Law of 1928 by which the Emirate was divided into four Liwas, or Administrative Districts. Below the level of the Liwa was a Qada, or sub-district, and below that, formed from a few villages, was the Nahiya.

On this basis TransJordan Government contained four Liwas which were, from north to south, Ajlun, Belqa, Kerak, and Ma'an. The Hejaz Railway marked the eastern

boundary of all four Liwas with the exception of Ajlun, the area to the east of the railway being administered separately (Annual Report 1935:276-277; SAC/Tripe 1942:15-16; MESC 'Economic Survey of TransJordan' [1944], WO 252/1166).

Each of the administrative units had a small group of officials with a range of duties, but limited powers. The Liwa was a District Council, presided over by a Governor or Mutasarif and two officials together with four elected members. The officials were appointed to run the Council. Election was open to males over the age of 18. The Liwa Governor had the authority to collect taxes, endorse claims made by cultivators for tax remissions, supervise the Protected Crops and Plants Law, and recommend the application of collective punishments (where required). Officials at the Qada level included a Junior Governor, an engineer, and a veterinary officer, all appointed, and elected members. The Junior Governor had no judicial powers, and only limited functions delegated to him by the Liwa Governor. Lastly, at the Nahiya level, the chief official, the Mudir, had the authority to supervise the partition of land under *Musha* tenure, apportion the taxes of individuals in *Musha* villages, and estimate tax remissions in the event of crop failure (SAC/Tripe 1942:15-16; MESC 'Economic Survey of TransJordan' [1944], WO 252 1166).

Apart from these sub-divisions, there were also Municipal Councils in all the major towns and larger villages: Amman, Salt, Irbid, Kerak, Ma'an, Madeba, Ajlun, Jerash, Tafila. Under a new Municipal Law which came into effect on April 1st 1938, these Councils were to be elected, with the exception of Amman, whose Council members were appointed by the Chief Minister. Another part of the Municipal Law allowed for certain members to be nominated, notably members with particular skills like the medical officer, a veterinary officer, and an engineer, in the expectation that the Council needed the advice of such professionals in matters relating to public health and public works (Annual Report 1937:311).

But the changes introduced in 1938 should not be seen as a diminution in the growth of 'local democracy', so much as the beginning of a process of bureaucratization in local government. The end result of this general reorganisation of local government at the territorial level, however, reduced the powers of local officials in comparison with their Ottoman counterparts. Government was becoming more centralised. Tripe (SAC/1942:15) argued that increasingly, local government acted as 'advisory bodies', whereas in the late Ottoman period, officials had more discretionary powers and judicial authority.

Part of this increased centralisation was seen in the levying, and spending of taxes. The Central Government set the *Octroi* Tax that was levied on imports, and set other taxes, but the proportion of taxes that was redistributed was small. For example, the Districts

received 50% of the receipts from the licence fees collected under the Road Transport Law, and only 20% of the revenue from the House and Land Tax Law was redistributed (Annual Report 1935:277). However, there is no indication of how these taxes were redistributed, or whether or not some Districts received a larger share than others.

vi) The Military

Early Developments

The creation and development of TransJordan's military forces began in October 1920, shortly after British military officers were posted to the country, when a reserve force of 100 men was created, recruited from among the sedentary population. The next month Frederick Peake was sent from Palestine to organize a more comprehensive force and in 1921 the force was expanded significantly to 1,000 men (Jarvis 1946:69).

But this expansion in the force did not necessarily mean that it was always effective. In October 1921, both T.E.Lawrence, and Hubert Young posted critical reports on the condition of the military forces. Young protested that the reserve force had 'no rifles, no ammunition, and no machine guns' (Young to Shuckbrugh, October 15th 1921, CO 733/7). Logistics were a particular problem for a military force still in the process of being created at a time of maximum disorder. In these circumstances, it is hardly surprising that the forces had difficulty in coping with the revolt in the Kura district between 1921-1922.

Because of the weakness of the land forces, the deployment of the RAF was seen as a critical factor in TransJordan's security, just as it was decided at the Cairo Conference in 1921 that the RAF should play a major part in Britain's imperial defences throughout the Middle East. The Air Service was considered to be ideally suited to desert conditions. Above all else, it was cheaper to deploy than land forces as well as being more effective. The bombing of Tibne in 1922 demonstrated the effectiveness of the RAF by breaching resistance in the Kura district. In the case of the Wahabi invasion of TransJordan in 1922, it was the shock factor of the appearance of an RAF aeroplane -apparently it was coincidentally flying over the affected area- which dispersed the raiders. Two years later, the RAF sent three DH9a's to repel a second Wahabi invasion, but though they inflicted casualties, the major factor in the defeat of the raid was, on this occasion, attributed to the prowess of Bani Sakhr fighters (Towle 1989:24-26).

The Arab Legion

In 1923, the reserve force was re-named the 'Arab Legion' (in Arabic, the 'Arab Army'). It continued to recruit from amongst the sedentary communities, but in later years it appeared to admit Egyptians, Sudanese, and Palestinians (Rolbant 1948:16).

The Legion only grew in numbers and strength in the later part of the Mandate years (see **Table 3** below). After the expansion of the Reserve Force between 1920-1921, it was reduced in size in the wake of the reorganisation of the administration after 1924. For most of the 1930s the Legion's numbers were stable at approximately 1,000 (including officers). It only began to expand in 1938, to be followed by a second phase of growth during the Second World War. Rolbant (1948:16-17) described the growth of the force as 'truly spectacular', but did not produce any figures. However, according to the MESC ('Economic Survey of TransJordan' [1944], WO 252/1166), by 1944, the Arab Legion had grown to 10,636 men.

TABLE 3: The Growth of the Arab Legion, 1920-1943

YEAR	TOTAL	OFFICERS	NCOs & MEN
1920 [1]	157	7	150
1921 "	1,000	-	-
1925 [2]	1,253	-	-
1926 "	1,600	-	-
1933 "	1,057	41	1,016
1934 "	1,045	40 [3 Cadets]	1,002
1935 "	1,046	39 [3 Cadets]	1,004
1937 "	1,061	*40 [3 Cadets]	1,018
1938 "	1,624	**44 [3 Cadets]	1,577
1943 [3]	10,636	n/a	n/a

*: 7 British Officers **: 5 British Officers

(SOURCES: 1: Jarvis 1946:69: 2: Annual Reports 1925-1938; 3:MESC' 'Economic Survey of TransJordan' [1944], WO 252/1166).

The Arab Legion functioned both as the national defence force and as the national police force. It was responsible for public order and law and order matters generally, for the supervision of prisoners taken into custody, for immigration and passport control, and for the licensing of motor vehicles (Annual Report 1935:303). The Headquarters of the Legion was in Amman. Here, in addition to the command centre, there were facilities for the education and training of staff, and workshops for motor vehicles and other equipment (Annual Report 1938:349).

The Desert Patrol

Apart from the Arab Legion, there were two other military forces in use in TransJordan: the Desert Patrol, and the TransJordan Frontier Force [TJFF].

Up until 1930, the Legion had not recruited from amongst the desert-based tribes. However, the onset of the drought in the mid-1920s, brought in turn a series of economic problems for the tribes which grievously eroded what had been a relatively autonomous way of life. While some tribes could find alternative opportunities in the sedentary zone, and were encouraged in this by the sedentarization policy of the Government, another option was to find salaried employment for some tribesmen. It was for this reason, and because the desert areas needed policing, that John Bagot Glubb was brought from Iraq in 1930 to organise the Desert Patrol. The Patrol provided tribesmen with a form of employment suited to their image of themselves as independent warriors (Tell 1991:9-10; Nieter 1938:22; Jarvis 1946:70).

In 1939, when Peake retired as Commander-in-Chief of the Arab Legion and was succeeded by Glubb, the Desert Patrol was absorbed into the Legion. The Desert Patrol, as suggested by its name, policed the desert areas, of which the most sensitive were the Wadi Sirhan and Jebel Tubeiq, in the south-east of the country. But the Desert Patrol was also responsible for order in the desert areas, where inter-tribal feuds, and rustling from Saudi Arabia were common. There were a series of forts or stations in the desert area, from which patrols of up to six men would make 4-6 day tours (Nieter 1938:23).

The TransJordan Frontier Force [TJFF]

The TJFF was formed on April 1st 1926 out of the mixture of forces that had evolved in Palestine during the early years of the Mandate. These forces included the Palestine Gendarmerie, the Palestine Police Force, and from 1922 the Mobile Reserve Force recruited from the 'Black and Tans' after their withdrawal from Ireland. In the reorganisation which took place in the mid-1920s, a clear division was opened up between the Palestine Police Force with civilian duties, and the military duties of the TJFF. Part of the TJFF was deployed in TransJordan, based at Zarqa, and 5/6ths of its cost was borne by the Palestine Government (Rudd 1990:163-170; Horne 1982:95-96) **[4]**.

One of the first duties of the TJFF when it was deployed in TransJordan was the supervision of the boundary with Syria and the evacuation of Druze refugees from Azraq in 1927. Apart from these duties, however, the internal role of the TJFF in TransJordan.was very limited.

Other Forces

The TransJordan Government permitted the occasional secondment of military forces to non-governmental agencies. Shortly after the completion of the Iraq Petroleum Company's oil pipeline, the Company subsidized its own detachment, which was seconded from the Arab Legion. The need for this arose because sabotage of the pipeline became a common occurrence in the 1930s. The detachment ranged from 59 men in 1935, to 79 by 1938 (Annual Report 1935:306; Annual Report 1938:348).

Territorial Responsibilities of the Security Forces

The functions of internal security and national defence were territorially organized along the lines of the administrative divisions within the country (see **Table 4**). There were two exceptions to this. One was the Desert Area east of the Hejaz Railway, which was sub-divided into a northern and a southern district. The other was the creation in 1938 of a separate Jordan Valley district, also sub-divided into a northern and a southern district. This came about because of the deteriorating security situation along TransJordan's boundary with Palestine.

TABLE 4: Geographical Structure of the Arab Legion, 1938

DISTRICT	DISTRICT HQ	NO OF POSTS
Ajlun	Irbid	13
Belqa	Salt	19
Kerak	Kerak	10
Ma'an	Ma'an	9
Desert Area North	Azraq	4
Desert Area South	Mudawarra	4
Jordan Valley North	Karameh	6
Jordan Valley South	Damieh Bridge	3

(Source: Annual Report 1933; Annual Report 1935:304; Annual Report 1938:349)

By distributing the security forces across the same districts as used by local government, they became an important component of the state apparatus in TransJordan. Forces were deployed in the key villages of each district, giving the central government greater access to all parts of TransJordan than had ever been achieved before. Though the equipment of the forces was rudimentary and their conditions hard, later in the Mandate, particularly in the 1940s, they did begin to acquire modern transport and communications technology. This allowed them to reach all parts of the country and more quickly than before.

With regard to transport, for example, in 1937 the Arab Legion had only 23 motor vehicles. The four administrative districts had one vehicle each, with a number of other vehicles at Amman. There were 13 vehicles to cover the Desert area (Annual

Report 1937:338). But these figures increased appreciably on the outbreak of the Second World War. By 1943 the Arab Legion's fleet of vehicles had reached 600 (MESC 'Statistics of Territorial Vehicles, TransJordan 1943-1945' FO 922/460).

Military Aviation

Only military aviation was not structured along the lines of local government because aircraft were centrally-based in Amman in order to be called up to deal with security problems in any part of TransJordan. Nevertheless there was a need in TransJordan for a geographically determined pattern of landing grounds. In the 1920s there were no formally designated landing grounds apart from the RAF aerodrome at Marka, on the outskirts of Amman. Aircraft could, and did land at other places on the desert terrain, but not without occasional accidents.

In 1929 the Air Council asked the Colonial Office to compile a list of sites in Palestine and TransJordan that could be used as landing grounds (Secretary of State to High Commissioner, February 26th 1929, FO 816 90). This request coincided with a period when raiding parties into TransJordan from Saudi Arabia were causing severe hardships among the tribes. As a result several landing grounds were laid out in that area as elsewhere. By the early 1940s there were up to 50 landing grounds across the country, their locations reflecting the sensitivity of the border areas, as well as other security zones in the more settled areas. No less than eleven landing grounds skirted the boundary with the Nejd and the Hejaz along the Wadi Sirhan and the Jebel Tubeiq.

Between 1929 and 1943, landing grounds were also set up near the boundary with Palestine at Aqaba, in the Wadi Araba, on the edge of the Dead Sea on the Lisan peninsula, and at Mejamie Bridge. On the boundary with Syria there were landing grounds at El Hamme, and further east near Dera'a. From here to the triangulation point marking the Syria-TransJordan-Iraq boundary there were seven landing grounds following the route of the IPC oil pipeline.

For the purposes of internal security, landing grounds were also established at five points along the route of the Hejaz Railway. Other landing grounds were located in areas of tribal encampments, notably in the areas between Bayir, el-Jafr, and Mudawarra **[Map 8, Chapter 7]**.

An important aspect of the security forces was the fact that they were (with the exception of the RAF and the TJFF), drawn almost exclusively from amongst the indigenous population without the need for conscription. Indeed, soldiering was the ideal occupation for bedouin who regarded other forms of occupation and the sedentary life with disdain. Hence the Desert Patrol was largely set up to meet the

economic and security needs of the Desert Areas. It can also be argued that the creation of an army whose rank and file were paid in cash was economically beneficial.

The purchasing power of the military did not fluctuate in the same way as that of the sedentary communities, whose farming was subject to unpredictable weather conditions, and whose crops were their only source of income, and in a barter economy, a source of exchange. The salaries of the military helped to stimulate the import of luxuries. However, the military was an unproductive sector of the economy as a whole, most (if not all) of its equipment and materièl being purchased overseas. If one includes Britain's Grant-in-Aid, the defence budget was well over half of the total budget for TransJordan in the years under consideration. However, there is little likelihood that any reduction in the defence budget would have allowed a transfer of funds into other departmental budgets (for example, to health). The Treasury in London would have welcomed any cuts in any (and every) budget if it reduced the size of Grant-in-Aid.

It was not until the Second World War that the expanded British military presence in Palestine and TransJordan proved to be economically beneficial. These extra troops needed foodstuffs and other necessities (for example, tobacco), and this expansion of market opportunities for TransJordan's cultivators and merchants coincided with, on average, an improved weather cycle.

vii) The Judicial System

Like many other aspects of the Mandate period, TransJordan's judicial system was shaped by its Ottoman past as much as its Mandate present. The British took over the whole of the existing body of Ottoman Law, and those laws that were not amended or repealed were allowed to remain in force. The structures of the Courts system and the judiciary were retained and became a vital part of TransJordan's maturing statehood. The Mandate authorities did, however, reorganize the geography of the Courts system to coincide with the structure of local government. This, to some degree at least, expanded upon the public's accessibility to the law.

The Late Ottoman Period

The legal system bequeathed to the British by the Ottoman Empire was a complex hybrid of Islamic and secular legal practices. There was a body of law derived from the Quran and other Islamic sources, which affected the personal status of Muslims, as well as property endowed for religious purposes (*'waqf'*). There was also a body of secular law which had built up throughout the period of Ottoman rule, as well as a body of law derived (in same cases, copied) from France's 'Code Napoleon', and which affected civil and criminal procedures. In addition to these broad features of the legal

system, there were special provisions for desert-based nomads, and for religious minorities, which in TransJordan essentially meant Christians (Annual Report 1935:296-297).

The Mandate Period

Despite this inheritance, in the years between the outbreak of War in 1914 to the onset of the Mandate in 1921, TransJordan's legal system declined into chaos. As a result, on May 3rd 1921 a Law for the Organization of Justice was promulgated which, in effect, reconstituted the system which had existed prior to November 1st 1914 (Annual Report 1935:290). This arrangement was later included in article 58 of the organic law of 1928. Some further changes were made in the 1920s and 1930s, but in essence, the legal system remained stable throughout the Mandate period.

For example, the Department of Tribal Administration, set up in 1921, was dissolved in 1924 and replaced by a Tribal Courts Law, eventually to be administered by the Bedouin Control Board which was set up in 1929 (Annual Report 1935:293). Also, following the Land Settlement Law of 1933, a special mobile court was established to adjudicate over matters relating to the redistribution of land.

The Courts System

The legal system was administered through a system of local courts. Minor civil and criminal cases were heard through the Magistrates Courts. These courts were held in the main towns of each local government district (Liwa) [**5**]. More serious cases were heard in the Courts of First Instance, held in Ajlun, Salt, Kerak, and Amman, and in the event of an appeal, there was a central Court of Appeal in Amman (Annual Report 1935:292 & 295; MESC 'Economic Survey of TransJordan' [1944], WO 252/1166).

For members of the armed forces there was a special military tribunal. Provisions were also being made to create a special court for foreign nationals -they could not be prosecuted without the authorisation of the British Resident- but such a court does not seem to have been set up before 1946 (SAC/Tripe 1942:21a).

Tribal courts were established in Amman, Irbid, Kerak, Ma'an and the Desert Area to deal with tribal matters, except for cases involving immovable property and blood feuds, for which other provisions were made. For religious minorities, there were courts in Amman and Hosn for the Greek Orthodox and Greek Catholic communities, and in Salt for the Greek Orthodox. Sharia courts were in existence in the same locations as the Magistrates Courts (Annual Report 1935:298; MESC 'Economic Survey of TransJordan' [1944], WO 252/1162).

The Judiciary

The Mandate administration inherited three kinds of judge and legal practitioner. Those who had been trained, and practised during Ottoman times, were generally considered efficient, but by 1921 most were close to retirement age. While another group had been recruited during the First World War, they were considered to be unsatisfactory, and from 1921 they were, whenever possible, progressively removed from office. A third group of younger men trained in either Damascus or Jerusalem began to emerge in the Mandate period. But lawyers trained in Damascus were viewed with suspicion, so that graduates of the law school in Jerusalem were preferred, even though this only gave tuition in English Law (SAC/Tripe 1942:19).

With a shortage of lawyers and judges efforts were made to streamline the Courts system. For example, in the early years of the Mandate it was common for five judges to preside at the Court of Appeal, and three at the Courts of First Instance. This system was later changed so that three judges presided at the Court of Appeal, and two at the Court of First Instance (Annual Report 1935:294).

Because of the complexity of statutory law, in March 1930 a special body called the *'Diwan Khas'* was created to help interpret the law and publish legal opinion. This body was composed of the Minister of Justice, two senior officials from the Ministry, and two senior officials from the administration. The *'Diwan Khas'* was also the only source of published legal opinion in TransJordan and through its decisions, which had the force of precedent, it had some scope to make law (Annual Report 1935:297; MESC 'Economic Survey of TransJordan' [1944], WO 252/1166).

As with many other areas of the Mandate administration, financial pressures meant that there was no appreciable expansion of the judicial system during the Mandate period. The annual cost to administer justice was always greater than the revenues that were raised from fines or fees. Nevertheless, the public had greater access to the legal system than in Ottoman times.

2. FINANCE

Introduction

The provision of a financial infrastructure was as essential to TransJordan as it still is for any modern state. It provides an operational framework for public and private economic transactions and obligations, and thus for the economic system as a whole. It should also provide the state with a reasonable degree of financial stability. This was, for example, a requirement of Iraq when it applied to the League of Nations for the termination of its Mandate in 1932.

In TransJordan's case, the experience of the TransJordan Government from 1921 to 1924 led Britain to associate financial stability with fiscal austerity. This policy was adhered to for most of the period after 1924 when Cox was British Resident, and was only partially relieved during the Second World War.

After a consideration of the Ottoman legacy, and a review of financial policy in general, the components of TransJordan's financial infrastructure that will be considered here are, a) banking, currency, and monetary policy; b) loans and credit, and c) the taxation system.

i) The Ottoman Legacy

TransJordan did not inherit from the Ottoman Empire a comprehensive financial infrastructure. The only banking facility in the country was the Salt branch of the Agricultural Bank which was opened in 1898. There had already been shortages of specie in the late Ottoman period, and because of currency shortages during the First World War people had hoarded precious metals, notably gold and silver. The Ottoman taxation system effectively ceased to function when imperial troops left the country in 1918. Even when British Military Officers moved into TransJordan no sustained attempt was made to collect taxes until the creation of the TransJordan Government in April 1921. The expansion of the agricultural sector in the late 19th and early 20th centuries had lead to a great demand for credit. In the absence of an effective banking sector, this demand was serviced by an informal system dominated by merchants, who often doubled as moneylenders.

ii) Financial Policy 1921-1946

1921-1924

During the early period of the Mandate, characterised as 'laissez-faire' by Guckian (1985:230), and discussed at the beginning of this chapter, neither the Colonial Office nor H.M.Treasury had direct control over TransJordan's budget or the disbursement or Grant-in-Aid, but this situation ended in 1924. Indeed, one of the key features of the new regime under Cox was the tight control that was exercised by British officials over spending and financial decision making in TransJordan.

1924-1946

Initially, in 1924, H.M.Treasury had sought complete control over TransJordan's budget. Instead of this a compromise agreement was reached whereby any expenditure on a new project costing more than £50 would first have to be approved by the Colonial Secretary, a procedure that was keenly observed. The financial decision making process that was instituted was cumbersome and time-consuming. It took the form of budget estimates prepared by the British Resident which were then bargained over by the High Commissioner and H.M.Treasury. The Colonial Office role was to intervene in an effort to persuade Amman to concede to the Treasury on some items, while inviting the Treasury to concede to TransJordan on other items. Nevertheless, H.M.Treasury continued to practise their ages-old doctrine, 'that the Treasury's business is to save money not to spend it' (Heclo & Wildavsky 1974:41). And Amman was keen to keep faith with the Treasury by showing that it was taking practical steps to reduce TransJordan's debt and the cost of its administration, and to increase domestic revenue.

In fact, though there had been some hope in 1924 that an improvement to the administration of the territory would encourage more economic growth in TransJordan, 1924 also saw the beginning of a cycle of poor rainfall years which created drought conditions, and deprived TransJordan of much needed revenue.

Nevertheless, in 1931, the British sent a commission to examine the economic situation in the Mandated territories, to recommend measures to reduce the Treasury's Grant-in-Aid, and to increase domestic revenue.

The O'Donnell Commission visited TransJordan in July 1931, where their brief was to examine the financial aspects of the administration, suggest where economies could be made and domestic revenue stimulated (Telegram from Colonial Secretary to the High Commissioner, January 9th 1931, CO 733 196/1a).

The Commission arrived at a low point in TransJordan's fortunes, a consequence of the cycle of drought years that afflicted agricultural revenue, and were forced from their observations to conclude that there were not many areas of the administration where economies could be made. They made recommendations for cuts in the administration, but confined themselves to suggesting cuts in the departments of Education, and Public Works. They believed that opportunities existed for the Government to extract more revenue from indirect taxation, and from customs and excise duties, but concluded that in the short-term there was no sign that the situation would improve (Report of the O'Donnell Commission [1931] CO 831 16/2).

Eventually, there was a relaxation of the Treasury's demand that expenditure on new items over £50 be referred to the Colonial Secretary. In 1930, the High Commissioner was authorised to approve expenditure of up to £100 but with conditions attached [**6**]. In 1939-40 these restrictions on financial decision making were lifted, primarily to meet the exigencies of the War.

iii) Banking, Currency, and Monetary Policy.

Banking

The Mandate period saw the emergence of a banking system, which was organized along the lines of British banking law and practice. The majority of banks which operated in Palestine and Syria before 1914 were foreign owned. The single largest was the Imperial Ottoman Bank, which was succeeded by the Ottoman Bank which opened a branch in Amman in 1925 and became the Government bank, a position it occupied until the creation of the Central Bank of Jordan in 1964 (Saleh 1977:19).

Because the banking system in TransJordan was subject to British banking legislation severe requirements were placed on any bank being set up. Any domestic bank would have had to have a minimum capital of £50,000 and a liquidity of £25,000. Foreign-owned banks would have had to have a minimum capital of £100,000. Only one private bank could meet these conditions and was allowed to operate in TransJordan. This was the Palestine-based Arab Bank Ltd, owned and operated by Abdullah Shoman. The bank opened its first branch in Amman in 1934, and another branch was opened in Irbid in 1943 (Saleh 1977:20).

The bank opened its first branch in one of the worst years of the drought. It was not a time when people had money to spend or save, and Shoman had difficulty selling the Bank's 137,000 shares (Shoman 1974:174-177). Nevertheless, Shoman arrived in TransJordan after having secured a base and a reputation in Palestine. The head of the Arab National Bank, Prince Habib Lotfallah, was less successful than Shoman. His attempt to set up branches in Palestine, Iraq and TransJordan came to nothing [**7**].

Currency

TransJordan's currency was in a confused state when Britain took over from the Ottoman Empire. The Ottoman Empire had withdrawn from the Gold Standard before the First World War and its gold-based currency, the Turkish Gold Pound, was being replaced by paper money. But people preferred coins of precious metals to paper, and though Ottoman currency was abolished by the British Occupied Enemy Territory Administration in Palestine in November 1918, existing specie of gold and silver coins continued to circulate (Said B. Himadeh, 'Monetary and Banking System', in Himadeh 1936:263-264).

In 1918 the British introduced the Egyptian pound in Palestine to replace Turkish currency. But this was intended to be only a temporary measure, owing to the fact that the new governments in Palestine and TransJordan would have no control over the issuing of the Egyptian currency, and no share of currency profits.

In 1924 a committee was set up to consider the creation of a Palestine currency, also to be used in TransJordan. Its recommendations led to the establishment in June 1926 of the Palestine Currency Board [PCB], which was given day-to-day responsibility for the management of the currency. The new currency went into circulation on November 1st 1927 with Barclay's Bank branch in Jerusalem acting as the agents and distributors (The Statist 1928:648; Government of Palestine, Office of Statistics 1941:xxi).

The Palestine Pound was comprised of 1,000 mils (10-mils to 1 Piaster), and available in notes and coins. There were six denominations of paper currency, two of silver, three nickel and two copper. (Government of Palestine, Office of Statistics, 1941:xxi; The Statist 1928:648-649). In fact, the copper coinage proved to be unpopular and was little used. This meant that the nickel 5-mil piece was the lowest denomination in circulation, and was one of the explanations given for the high cost of living in TransJordan (Konikoff 1946:87; Evidence given by Alec Kirkbride to the 36th Session of the Permanent Mandates Commission, 1939, p195). Despite the new coinage, barter remained a major means of exchange in TransJordan and this often involved gold and silver being exchanged for goods.

The movement of gold and silver tended to reflect the political and economic situation in the country. During both the First World War and the Second World War, gold and silver were hoarded for use in safer times. During the depression of the 1920s-1930s there were large exports of these precious metals as people liquidated the gold and silver they had hoarded in the War and ventured outside TransJordan to purchase goods (Naval Intelligence Division 1943:501).

Given these conditions, figures on the liquidity of the Palestine currency in TransJordan can tell only a part of the story. The High Commissioner in 1931 admitted that 'there is no reliable means of determining with precision the amount of Palestine currency circulating in TransJordan month by month' (High Commissioner to Secretary of State, June 26th 1931, CO 831 14/14). Konikoff (1946:86) has listed figures for liquidity in TransJordan: for 1931-32 as £P150,000; for 1934-35 £P275,000; and for 1938-39 £P400,000, but these are only estimates based on TransJordan's share of the profits of the Palestine Currency Board [PCB].

With nothing to go on but these estimates, the liquidity figures for an overall population of between 300,000-400,000 appear to be low. This suggests that barter still played a prominent role in exchange. For example, according to AbuJaber (1989:59) in 1930 in the Belqa, grapes could be bartered for wheat. The going rate appeared to be two boxes of grapes (approximately 15kg) for 18kg of wheat.

Monetary Policy

As far as any monetary policy existed for TransJordan, it was directed by the PCB, whose decisions on monetary policy were made by its board of British officials, who were appointed by the Colonial Secretary (Saleh 1977:25; Owen 1982:4). It operated under the Sterling Exchange Standard, from 1939 the Sterling Exchange Area.

There were drawbacks to the operation of the PCB. First, because the Palestine Pound was convertible with Sterling the quantity of currency that could be issued was determined by deposits held in London where the value of the currency was fixed. This value was based on the money that Palestine and TransJordan earned rather than what was needed. Overall, this had a deflationary effect on the economies of Palestine and TransJordan (Saleh 1977:5).

Second, because of the tight control of the money supply exercised from London, the emergence of domestic capital markets in TransJordan was precluded. Third, the practice of the banks was to use their deposits for lending out to creditworthy institutions, so a proportion of the currency, instead of being re-cycled in the domestic economy, was exported to Britain in the form of sterling investments. That is, TransJordan, like the formal colonies of the Empire was 'lending to the United Kingdom part of their national savings for a paper title' (Saleh 1977:6-7).

On the other hand, having this close financial relationship with Britain could also be beneficial. Both Palestine and TransJordan acquired the rudiments of the modern banking system which Britain enjoyed so that people were encouraged to use cheques, and to lodge savings in a bank account. The legal framework for the operation of the banking sector prevented the banking failures that took place, for example, in Syria,

where in the absence of controlling mechanisms, five banks collapsed in the years 1931-1936 (Saleh 1977:26). In addition, the Sterling convertibility meant that TransJordan's currency was soundly based. While the tight control of the money supply had a deflationary effect on the economy, it also had the obverse effect of controlling the rate of inflation.

iv. Loans and Credit

Despite this essential soundness of the currency and monetary policy, the system lacked a proper loan and credit arrangement to allow the economy to develop. This was made worse by the unpredictable nature of the agricultural sector in TransJordan and the lack of confidence which this created for lending to farmers. The persistent drought conditions between 1924 and 1936, and in certain years after that, reduced the confidence even farther, as farmers and landowners found they could not repay their debts. As a result, the two main lending agencies, the Agricultural Bank, and the Ottoman Bank, did not appreciably expand their credit facilities over the Mandate period.

Two factors militated against the wider use of banks as a source of credit. One was the low level of currency liquidity amongst the population. This was particularly keen in times of economic distress so that banks simply did not have the money to lend. When there was a good harvest, farmers spent money on the repayment of debts, on luxuries such as tea, rice and coffee, and on weddings. It was not put into bank accounts, so that the propensity to save was low. Banks also had little money to lend because people were often reluctant to place money with agencies that charged interest and broke the Islamic code. Secondly, the 'elastic' notion of time with regard to debt repayment was not suited to the strict banking practice which had been introduced into TransJordan. In a good year, the creditor would expect a portion of the debt to be repaid on time, but if the harvest was poor, the likelihood was that debt repayment would have be deferred, often for at least a year till the next harvest.

The negative feature of the informal sector were the high interest rates and the threat of land alienation for those who could not pay their debts. It was not uncommon for credit to be advanced at interest rates of between 30% and 100%, with the creditor retaining an option to acquire the debtors land if the debt was not repaid. The informal sector was also unsuited to the longer term investment needs of farmers in order to improve the agricultural system.

v. The Taxation System

The Late Ottoman Period

In the late Ottoman period, five main taxes were levied on the population. The *'Osher'* was a tithe on agricultural produce, and was levied on grains, fruits, and other crops except fresh vegetables, which were exempt. The *'Werko'* tax was a land and building tax; there was an animal tax, and a road tax (Grunwald 1932:16-20; Konikoff 1946:87), and *'Temettu'*, or a personal tax was also levied.

There was also the tax levied on local sales, and toll rates on the bridges across the River Jordan, and 'extraordinary' taxes, raised for specific projects, such as the construction of the telegraph line from Damascus to Salt in the 19th century, and the 'Hejaz Stamp Duty' which was raised for the construction of the Hejaz Railway in the early part of the 20th century (Rogan 1991:238-240; Konikoff 1946:93).

These taxes were not apportioned equally across TransJordan. For example, in the case of the *Osher* tax, while the rate was fixed in the Ajlun, Kerak, and Ma'an districts, it was assessed at 12.5% of the gross yield in the Belqa district (Konikoff 1946:87-88). Also, once the *Werko* property tax had been applied in the 1880s, there were no property revaluations again until the 1930s. Not surprisingly people would devise various avoidance strategies to underestimate their tax contributions (Grunwald 1932:20).

The Mandate Period, 1921-1946

The Mandate Administration, like the Ottoman Administration before it, looked to the agricultural sector as the main source of economic activity and thus also, of tax revenue. But it became clear in the early years of the Mandate that the tax revenue which agriculture and the rest of the economy could raise fell short of needs, in terms of the cost of the administration and of the development of the country. In the Mandate's first years, between 1921 and 1924, taxes had been raised to punitive levels while the income from them was, in the opinion of officials like Bertram Thomas, improperly disbursed. When Cox took over in 1924, the tax system was revised along with the reform of land tenure, and Government expenditure was subject to severe fiscal austerity to keep taxes down.

Direct Taxation

The Ottoman forms of direct taxation were retained until 1933, when under the Land Tax Law, the *Osher, Werko* and Road taxes were replaced by a single tax which was to be standard across the country. The average land tax was to be levied at 21.78-mils per dunum, but because of considerable opposition to the new law from the large and

influential landowners a compromise was reached whereby the total annual amount of revenue raised by the Land Tax would not exceed by more than £P10,000 the equivalent of all three of the old Ottoman taxes. In other words, this compromise effectively precluded the Government from increasing the revenue from the Land Tax. Moreover, the statistics of the Lands and Surveys Department suggest that there were so many smallholdings with a low taxable potential that there would never have been great scope to raise taxes from land, even without the chronic problem of erratic harvests (see Chapter Five).

The Ottoman Animal tax was replaced in 1929 by an Animal Tax Law, succeeded in 1943 by the Animal Tax (Amendment) Law. A revised version of *Werko* for urban areas, the House and Land Tax Law, was introduced in 1925 but it was not applied to Amman until April 1928, and to other urban areas in the early 1930s (Konikoff 1946:90-91). The Ottoman *'Temettu'* or personal tax was replaced by a new Income Tax Law, introduced in 1933. Agricultural labourers, cattle hands, and members of the TJFF were exempt from income tax (Konikoff 1946:91-92).

Notwithstanding these exemptions from personal taxation, the TransJordan Government found that the circumstances of the drought were so severe in many parts of the country, that even those liable to pay taxes were exempted. Between 1924 and 1931, a total of £63,428 in tax remissions was authorised. Between 1931 and 1934, £68,632 of taxes were remitted (Annual Report 1935:328). In these years, receipts from direct taxation appear to have ranged from between £101,000 to £138,000, but the figures produced combine receipts for licenses as well as taxes, so the exact figure on tax receipts is not clear (Annual Report 1932:254; Annual Report 1935:329). Even though the figures for tax remissions appear to be quite small, compared to the annual receipts, the point is that any loss of revenue in TransJordan was liable to hinder economic growth. Moreover, it is not just at the aggregate level that this problem took place. Individual farmers who in good harvest years would have purchased inputs and other goods, suffered the most.

Indirect Taxation

The primary sources of indirect taxation were customs, excise and stamp duty. Under Article 18 of the Mandate, TransJordan was to have an open trading regime with member states of the League of Nations. Special customs arrangements were made for Palestine and Syria to encourage trade, and the Customs and Excise Law of 1926 also exempted import duty on goods entering the country from the Nejd and the Hejaz.

The 1926 law also restricted the number of official entry points into TransJordan. Anything entering or leaving the country by other routes was deemed to have been smuggled. Customs exemptions applied to a variety of commodities, such as

machinery, seeds, or raw materials used in agricultural development, while full customs and excise duty was levied on tobacco, pure alcohol, and alcoholic drinks (H.A.Turner [Director of Customs] Memorandum, September 1934, CO 732 65/10) [8].

The tariffs on imports were levied at 12% *ad valorem* until 1936. Then a League of Nations system was introduced which listed those items to receive the *ad valorem* rate, while the rest had specific rates, or were exempt (Konikoff 1946:92).

In 1936 a new Revenue Stamp Duty Law was introduced on bills of exchange, marketable securities, contracts and guarantees: on leases, partnership agreements, title deeds and life assurance policies. (Konikoff 1946:93).

A considerable proportion of taxes in TransJordan were not collected, either because of official exemptions, or due to remissions in drought years. Another phenomenon, about which there is little definite information, was also responsible for a loss of revenue to the state. This was the operation of the 'shadow economy'.

vi. The 'Shadow Economy'

Smuggling was a common practice in the region in the Mandate period, stimulated by the prohibition of certain goods, such as narcotics, and profits that could be made by smuggling taxed commodities such as tobacco and alcohol. Nomadic tribes looking for economic compensation in a period which saw the decline of the camel market and severe deprivation in time of drought could exploit their knowledge of desert routes to avoid the official customs posts.

Hashish was a commonly smuggled commodity, particularly from Syria through TransJordan to Egypt. An organised smuggling ring was broken in 1932, but incidents of smuggling continued to be a problem thereafter (Annual Report 1932:231; Annual Report 1933:282; Annual Report 1935:306; Annual Report 1938:360).

In the case of tobacco smuggling, there is a suggestion that the local production of cigarettes in TransJordan in the late 1920s was started partly to erode the smuggling trade in tobacco. While no estimates exist for the scale of smuggling, the number of prosecutions are indicative of its scale. These increased from 179 prosecutions in 1935, to 227 in 1937 (Annual Report 1937:378). Movement of goods out of TransJordan was also common as a re-export trade, and was stimulated by the cheaper prices of certain goods in TransJordan compared to Palestine.

For example, in 1931, Benzine was 200-mils for a 4-gallon can in Palestine, compared with 130-mils in TransJordan, or 180-mils in Amman where it incurred a Municipal Tax. Sugar was 10-mils a kilo in Palestine, 7-mils a kilo in TransJordan. Matches

were 200-mils a gross in Palestine and 75-mils a gross in TransJordan (Report of the O'Donnell Commission [1931], CO 831 16/2). There is no reason to believe that some merchants did not exploit these price differentials in the 're-export' trade.

A similar argument can be advanced to account for the fact that Japanese cotton pieces formed one of the largest imported products into TransJordan. Konikoff (1946:66) argues that this trade thrived because of lax currency and import controls in Iraq, and that a lot of cotton pieces were purchased in Baghdad at favourable prices by TransJordan traders and then re-exported to TransJordan, and through TransJordan to other countries where higher prices could be obtained. Credence for this practice is given by Shimizu (1986:193-197), who argues that access to markets in Syria and Palestine free of customs tariffs was exploited by TransJordan traders for markets in other countries. Turkey was a favourite target owing to the high tariffs imposed on cotton imports there. In the absence of any further documentation, it would appear to be the case that cotton goods were smuggled into Turkey in order to avoid paying customs duties there.

During the Second World War, the direction of the re-export trade was reversed, with goods flowing into TransJordan where domestic merchants made handsome profits. Prices for staple goods were cheaper in Palestine because merchants had access by licence from the Middle East Supply Centre to goods in bulk. As there were no effective price controls in TransJordan, the result was that merchants purchased staples in bulk in Palestine, and charged inflated prices in TransJordan. For example, rice and sugar fetched five or six times the price in TransJordan that they fetched in Palestine (Letter from Ethel and G.M.Wright [Salt Medical Mission] to London Office, Spring 1943, CMS/AS 35-49/G2/Pm4).

CONCLUSION

Two features of TransJordan's political landscape in the Mandate period stand out: the contraction of space that took place, and the development of political-administrative institutions.

In 1914 TransJordan had been a provincial outpost of the Ottoman Empire, its northern districts administered from Damascus, its southern district from Mecca. Ottoman authority was effective in the northern districts of Ajlun and Belqa, partially effective in Kerak, but weak in the southern district of Ma'an, and non-existent in the desert areas east of the Hejaz Railway. There were social and economic ties between TransJordan and Palestine and Syria, while the tribes had free access on a customary basis to the wells and grazing lands in the desert area between Syria and northern Arabia.

After 1921, TransJordan was restructured as a self-contained political unit. It was transferred from one imperial system, the Ottoman, to another, the British, albeit as a Mandated territory of the League of Nations. Over a period of twelve years, from 1920 to 1932, TransJordan was endowed with international boundaries. These boundaries circumscribed the space which became known as TransJordan, and which separated it from the other 'new states' of the region, Palestine Syria, Iraq, and the emergent Saudi Arabia.

As a consequence of these processes, the TransJordan-based tribes that had once enjoyed free access to resources in the desert area, now found that Syria and Saudi Arabia used the demarcation of territory in order to impose taxes on tribes entering their land, and tribal merchants found their trading links severely reduced (and thus, less profitable than before), or completely severed. These blows to the tribal economy were aggravated by the drought, and by rustling in the Wadi Sirhan, particularly in the late 1920s and early 1930s, which severely depleted their sheep flocks and camel herds. The result was a contraction of mobility, as the tribes restricted their movements to TransJordan, in some cases, abandoning the nomadic way of life altogether.

Another important feature of the contraction of space which took place was the way in which TransJordan's political arrangements were centred on Amman. From there, the Government and the armed forces exercised a more comprehensive command and control of TransJordan than had been possible under Ottoman rule. The growth of mechanised transport and the deployment of the RAF meant that every part of TransJordan became accessible, if not within hours by aeroplane, then within a day by road.

The people were also brought into a closer relationship with the Government. Where before, government had been remote from the people, in the Mandate period it was omnipresent without being oppressive. People had access to officials at the local level in all of the towns, and through this local government structure also had access to the judicial system. This was an advance on what had been achieved in this area by the Ottoman Empire.

The contraction of space in TransJordan that was a marked feature of the Mandate period was attended by the development of political-administrative institutions. The state apparatus in TransJordan in this period was small, and it was dominated by British officials, but it grew from virtually nothing in 1921. Between 1921 and 1946 there was established in TransJordan a Hashemite Emirate under Abdullah, complete with a Royal Court, a standing army, a central and local government apparatus, and a judiciary. These institutions were subject to the constitutional arrangements that were

agreed between Britain and TransJordan and codified in the Organic Law in 1928. The Mandate administration based the local government system on the Ottoman Empire's territorial divisions of the country, but increased its scope through the network of district and municipal councils that were set up in the 1920s.

These political arrangements, and also the provision of a comprehensive judicial system, helped to create the manageable space in TransJordan within which the commands of the centralised state -for example, with regard to land reform and tax collection- could be authoritatively imposed.

The financial system of TransJordan during the Mandate period was rudimentary. There was a fundamental lack of trust between the Treasury in London and the Arab officials of the TransJordan Government. This meant that the country's budget was tightly controlled in Amman and London by British officials, who did not relax their grip until the 1940s. In addition to this, economic growth was slow, primarily because of the impact of the protracted drought between 1924-1936, which deprived TransJordan of a considerable amount of domestic revenue. TransJordan did not have its own currency, and its banking laws and practices were integrated into the economic system of the British Empire. The absence of an effective banking sector in TransJordan meant that the domestic demand for credit went unfulfilled in the formal sector, perpetuating the indebtedness of people to the informal sector dominated by merchants and moneylenders which had also been a feature of the late Ottoman period.

One important consequence of the above developments was that the political-administrative sector grew faster than the economy. This meant, as Robins (1989:344-345) has argued, that by 1946 TransJordan's institutions were stronger than its economy, and thus made it easier for the state to take a leading role in economic affairs in the independence period.

Even though government departments were short staffed and their budgets small, TransJordan was in the process of creating an 'infrastructure of power'. That is, the central government had control of the territory and the population, it could move its military forces without infringement to all parts of the country, and it could secure compliance from the population with commands issued from the centre. But if Amman had secured political and military power, there remain the problematic areas of ideology and the economy. Little research has been conducted on ideology in the Mandate period. The safest one can say is that TransJordan was slow to articulate the anti-imperialist Arab Nationalist agenda that was a feature of political life in Egypt, Palestine, Syria and Iraq at this time.

The weakest component in the 'infrastructure of power' was the economy. The British Mandate provided TransJordan with financial institutions,but these were so limited in

terms of their capital assets, and subject to a fiscal policy so austere that it imposed a deflationary regime on TransJordan. However, the provision of financial institutions was only one part of the economic whole. It was economic growth in the agricultural sector which was supposed to provide TransJordan with a sufficient foundation to enable it to 'stand alone' as an independent state. How the infrastructure was developed to stimulate agricultural production in the Mandate period will be examined in the next two chapters.

NOTES

1. According to the correspondence of the Church Missionary Society, which had a Medical Mission at Salt, prices in TransJordan after the War rose by 80%, and rents by 175%; see Letter from Rev. MacIntyre (Jerusalem) to London HQ, May 8th-9th 1923, CMS/CM/G3/PP7.

2. In fact this sum was an overestimation of the final cost of the earthquake. No more than £10,000 was actually spent, while a 'special loan' of £4,000 was transferred, with Treasury approval, to the anti-locust campaign.

3. See the Document on the 1965 Boundary Agreement, in Middle East Journal 1968:346-348.

4. The TJFF was a multinational force, comprised of Arabs, Jews, Caucasians, Turks, Kurds, Druze, Egyptians, Sudanese, Armenians, Assyrians, Russians, Yugoslavs, Javanese, Indo-Chinese, Indians, Germans, Africans, Greeks and at least one American, see Barnes 1978:68.

Rudd (1990:178) has the following figures for Jews in the TJFF: 1926: 37 out of a force of 775 (4.7%); 1927: 26 out of a force of 730 (3.5%9; 1928: 27 out of a force of 682 (3.9%).

5. There were Magistrates Courts in most of the main towns of the four districts, that is, in Irbid, Jerash and Ajlun (Liwa of Ajlun), Salt and Madeba (Belqa), Kerak and Tafila (Kerak), and Ma'an. Amman was administered as a separate administrative area, and had its own Magistrates Court. See Annual Report 1935:292, 295; MESC 'Economic Survey of TransJordan' [1944], WO 252/1166.

6. The High Commissioner was authorized to approve expenditure up to £100 on any single item up to an aggregate limit of £2,000 in any one financial year. Decisions on expenditure could be delegated to the British Resident. The £100 was a figure for the total cost of a project, not just on a year's expenditure. Any extra payments on a project over £100 would have to be met from elsewhere in the budget (Nind-Hopkins [Treasury] to Colonial Secretary, June 26th 1930, CO 831 10/8).

7. Lotfallah's attempts to expand the operations of the Arab National Bank were backed in Britain by the Labour MP Cecil L'Estrange Malone, see Malone's letter to Henderson in the Foreign Office, October 24th 1929, CO 732 41/21. Lotfallah failed to convince either the Foreign or the Colonial Offices that he had sufficient banking experience or capital.

8. A tobacco excise was first introduced in 1927 to coincide with the start of the domestic production of cigarettes. In 1931 the rates were 120-mils per kg of cheap brand tobacco, 220-mils for other brands. When the O'Donnell Commission criticised these rates they were raised. By the 1940s the rates were 500-mils per kg of cigarettes, 350-mils per kg of tobacco. As a result of the increased demand from troops stationed in Palestine, the tobacco tax which raised an average of £13,000 per annum before

1939, reached £60,000 in the War years (Report of the O'Donnell Commission [1931], CO 831 16/2; Konikoff 1946:93).

CHAPTER FIVE
AGRICULTURE AND THE ECONOMY I: LAND REFORM AND THE SEDENTARIZATION OF THE NOMADS

Introduction

The next two chapters will consider how far TransJordan's agricultural sector was developed during the Mandate period. At the time, agriculture was viewed as the most important part of TransJordan's economy. This chapter will focus on the process of land reform, and the sedentarization of the nomads, two factors that the Mandate administration considered to be important in their long term objective to create a commercially prosperous, self-sufficient economy in TransJordan. It is only in the last few years that any detailed studies of the land reform programme during the Mandate period have been undertaken, by Michael Fischbach for the Ajlun district, and by Lars Wåhlin for the 'Allan area north of Salt. This chapter can only incorporate the preliminary results of their research, and is therefore more concerned with the general impact of land reform between 1921 and 1946.

1. Land Reform

The Late Ottoman Period

The Ottoman reforms of the 19th century were designed to strengthen and centralize the Empire, and to modernize the economy. In the Syrian provinces, the reforms were implemented through the restoration of Ottoman authority, and through the reform of land tenure. The long term aim of the Imperial Government was to make agriculture a profitable enterprise, and through an increase in agricultural production generate an increase in tax revenue.

Throughout the late Ottoman period there was an increase in the demand for the Ottoman Empire's primary products by markets in Europe and North America. But in addition to this factor, the Ottoman Government did not want to allow European merchants and bankers extensive access to the internal markets of the Empire. In this they failed. Between the 1850s and 1914 the Ottoman Empire became deeply indebted to European bankers and merchants, while the extent and the mobility of European capital increased the control that the Europeans came to exercise over the Ottoman economy. By 1914 the Ottoman Empire was a net exporter of primary products, and a net importer of European and American manufactured goods (Pamuk 1987:71-72).
TransJordan was not immune to these developments, but its experience of them was not as intense as it was, for example, in the Beirut region or the coastal areas of Palestine.

Although some merchants imported foreign goods into TransJordan, the principal impact of the Ottoman reforms was to initiate a transformation of the domestic scene in TransJordan, stimulating agricultural production in the cultivable zones of Ajlun and the Belqa at the expense of the complex relationship which had previously existed between the 'desert and the sown'.

Three factors initiated the transformation of TransJordan in the late Ottoman period. One factor was the restoration of Ottoman direct rule, which began with the establishment of a military garrison at Salt in 1867. From this strategically advantageous position, Ottoman forces could more easily exert their authority over the countryside, and were beginning to expand their authority into the Kerak district when the First World War broke out and interrupted their progress.

With the restoration of Ottoman direct rule after an absence of nearly 300 years, there emerged a new regime of public order which worked to the benefit of sedentary cultivators. These were, for the most part, villagers in Ajlun and Belqa and some areas of Kerak. Prior to the restoration of Ottoman authority, the villagers had formed alliances with the desert-based tribes, based on the brotherhood tax, or '*Khuwa*'. The '*Khuwa*' was, in effect, an inter-communal agreement which regulated access to those goods that were produced in TransJordan, or were 'taxed' from passing caravans; it also took effect with regard to social and political affairs. In practical terms, a villager entering a '*Khuwa*' relationship with a tribe would be granted protection, while villagers living outside the '*Khuwa*' would be vulnerable to raids from rival tribes. However, if a village was raided, it could expect its losses to be compensated for by the protecting tribe (Lancaster 1981:121-124; Lancaster & Lancaster 1989:11).

From one point of view, the inter-communal relationships that emerged in the period between the late-16th and mid-19th centuries helped to complement the economic activities of sedentary cultivators and nomadic tribes. Fertile land in the Belqa was either not intensively farmed or farmed only in selected areas, while much of the remainder was used by the tribes for the grazing of livestock. From another point of view, however, the nomadic tribes were more mobile, and possessed of greater military prowess, and therefore tended to dominate the '*Khuwa*' relationship. Moreover, there was a proliferation of such alliances across TransJordan, of varying degrees of wealth and power, so that disruptions to the agricultural life of TransJordan were common. This proliferation of alliances did much to contribute to the view that TransJordan was some kind of 'bandit country', yet, in fact, it also meant that the Ottoman armed forces, with their superior organization and military technology, had little difficulty in restoring their authority to the cultivable zone. The result was a noticeable tilt toward sedentary farming at the socio-economic level.

This tilt toward agriculture, which began to take effect in the last quarter of the 19th century, was buttressed by the second factor which helped to transform TransJordan in this period, land reform.
The Ottoman Land Code of 1858 was designed to achieve two things. One was to maximise the amount of land that could be owned by the state. The other was to change the different types of leasing arrangement that could be agreed with interested parties, such as cultivators, merchants, and tribes, with a view to promoting more efficient and market-oriented farming practices. The result of these reforms, it was hoped, would be an expansion in the profitability of the agricultural sector and thus also, of the Empire's tax receipts [**1**].

The nomadic tribes were particularly vulnerable to these reforms. As was mentioned in chapter Two above, the Circassian immigrants were re-settled in the Belqa in the late 1870s on preferential terms, and at the expense of the Bani Sakhr who laid claim to the land. With no other means of retaining their land, and with increasing fears that they would forfeit it if they did not register it, the tribes began to accept land registration even though it is also recognized that it was more sensible to register only the better land so as to reduce the tax burden (Rogan 1991:116-117; Bocco 1989:6).

The Ottoman land reform process was seen to be effective, if slow to be applied. By 1918 the authorities had reclaimed ownership of 90% of the cultivable land of TransJordan as state, or '*Miri*' land (Aruri 1972:53). Throughout the late Ottoman period more land was brought under cultivation. More land was registered by existing cultivators, by tribal sheikhs, by merchants originally from Palestine or Syria, and by immigrants from the Caucasus, and from Egypt. While it has been suggested that, generally, the Land Code was poorly administered (Warriner [1944] in Issawi 1966:74), in TransJordan it can be argued that it was a strategy which fundamentally changed the land use pattern. More land came under cultivation, with the emphasis on cereals, tree-crops such as olives, and vine-fruits. In turn, this reduced the amount of land that had been used for the grazing of livestock, particularly in the Belqa district.

The third factor initiating the transformation of agriculture in TransJordan appeared concurrently with the restoration of Ottoman direct rule and the implementation of the Land Code. This was the expansion of market activities in TransJordan, Palestine and Syria. The new public order regime which began to take effect in 1867 was an attraction for merchants from neighbouring lands keen to exploit opportunities in TransJordan. Though some merchants from Palestine had engaged in small-scale trading before 1867, there was a steady if slow increase in activity toward the end of the century. More of TransJordan's surplus product was purchased for sale in markets in Palestine and Syria,

while merchants became sources of credit for cultivators, and in time became landowners themselves (Rogan 1991:339-345).

The opening of TransJordan to regional markets was also stimulated by the progressive dismantling of the Empire's internal customs barriers. This process took place throughout the late Ottoman period and by 1914 had created a unified free trade area in the Empire (Issawi 1988:41-42; 128; 418-419; 434). Thus, an important long term transformation that affected TransJordan as well as other parts of the Syrian provinces was the slow transition away from subsistence towards capitalist agriculture (Sluglett & Farouk-Sluglett 1984:409).

The Mandate Period

Early Views of the Agricultural Sector to 1924

The trend towards the greater cultivation of land in TransJordan, set in motion during the late Ottoman period, was slow to take effect and not immediately apparent to British officials when the Mandate over TransJordan began. To these officials it appeared that much of the land was farmed as it had been for centuries, collectively rather than by individuals. Many villages, particularly in Belqa and Kerak districts, appeared to consist of little more than a group of tents rather than fixed dwellings, as they would eventually become. Also, records were hard to come by as the Land Registry in Salt had been ransacked during the War, in an effort by cultivators to remove the evidence of outstanding debts, and unresolved land quarrels (Wåhlin 1992:96).

At the outset of the Mandate period there was a view that TransJordan contained fertile, but unexploited, and sparsely populated land. The Zionist leader, Chaim Weizmann, at the Paris Peace Conferences in 1919, pressed the British Government to concede the maximum amount of territory that the Balfour Declaration would allow to be included in Palestine. Weizmann's view of TransJordan was that it was 'vast and unpopulated', that it had once been the 'granary of the whole of Syria', and that it would benefit from an influx of Jewish immigrant farmers from TransCaucasia. He estimated that 60-70,000 immigrants could be settled in TransJordan (Weizmann, Report to the Foreign Office, February 2nd 1920, FO 371 4187).

The High Commissioner for Palestine, Sir Herbert Samuel, also took the view that TransJordan was a fertile, but unexploited land. When the Occupied Enemy Territory Administrations were dissolved in the summer of 1920, Samuel argued for an extension of British authority across the River Jordan. He believed that the country was capable of generating enough domestic revenue to support an administration, the provision of public

works, and 'leave considerable surplus after that for general expenses in Palestine' (Samuel, Telegram to Lord Curzon, August 7th 1920, in Butler & Bury 1963:334) [**2**].

Samuel argued that TransJordan could be productive enough to pay its own way, and that it would eventually become a part of Palestine. At this point in 1920, an independent administration in TransJordan was not conceived of, or planned for. The efficient administration and cost of an independent Emirate only became important issues in the years between 1921 and 1924, when Samuel still hoped to see TransJordan fully integrated into Palestine.

In the first months of the Mandate it did seem to be the case that TransJordan could generate the revenue it needed for its administration. Lawrence reported that between January and October 1921, £66,433 had been collected in taxes, with a further £26,000 due by the end of December. As he calculated the year's expenditure at approximately £90,000, he expected the administration to break even (Report by Colonel Lawrence on the Situation in TransJordania, October 24th 1921, CO 733 7).

However, by 1924 it was clear that the cost of administering TransJordan as an Emirate with its own Royal Court, military apparatus, and an apparently tax-hungry Government, had been seriously underestimated. These dominant views on TransJordan's prospects seem to account for the lack of a coherent policy towards agriculture in the years before 1924.

Land Reform 1928-1933

After 1924 the Mandate administration made a more concerted effort to reorganize the agricultural sector, though most of its efforts were put into land reform, rather than other aspects of this sector (see Chapter Six). Indeed, with one important exception, the land reform programme under the British Mandate was similar to the land reform of the late Ottoman period. Whereas the Ottoman state sought to regain the overall possession of land, the better to re-lease it for commercial purposes, the British Mandate opted for the complete privatization of land, excluding forests. The British saw no need for the state to own farming land, and believed that outright private property was the key incentive to improving farming efficiency and output (Walpole 1947:57).

Land reform progressed in stages from 1928 onwards, and was based on a report on land tenure prepared by Sir Ernest Dowson in 1927 for the TransJordan Government. This report initiated a fiscal survey of the cultivable zone, which began in 1928 and was completed in 1933. The fiscal survey was carried out to evaluate the land for tax

purposes, and to demarcate village boundaries in advance of any individual land settlement.

The fiscal survey established that 5.21 million dunums of land were under cultivation in TransJordan, of which the greater part, some 4.15 million dunums, was used for rain-fed cereals. There were 2.2 million dunums of land in the Jordan Valley or on the plateau close to the Hejaz Railway which had potential for cultivation but were underexploited. There were also 440,000 dunums of 'patch vegetation' or 'shera' land, south of Shobek, considered suitable for the grazing of livestock.

Land Settlement 1933-1946

Following the conclusion of the fiscal survey in 1933, the longest and most complex feature of land reform was begun. This was the settlement of land ownership through land registration, a process that was completed in the Ajlun district in 1938, but still in progress in the Belqa district in 1946 when the Mandate was terminated.

The legal basis for land settlement was the Land Settlement Law of 1933. This provided for the individual entitlement to land to be registered, a process which required competing claims to land to be resolved. Also, the Department of Lands and Surveys used the land settlement process to embark on a cadastral and topographical survey of each village in TransJordan. The aim was to collate, eventually, a comprehensive bank of data on the land and the people. This was to be used for the purposes of taxation, but was also a means whereby land could be measured, mapped, and numbered, and its ownership recorded (Walpole 1944:162-165).

What the limited available research on land settlement has revealed so far is that there was an increase in the number of individual landowners but that most held small plots, and most were local to the areas where they registered land.

In the Ajlun district, for example, Fischbach has established that between the passage of the Land Settlement Act in 1933 and 1940, 34,000 landowners registered their plots, with an average of 57 dunums per owner. The figures for individual ownership in the area increased to 42,000 by 1949, but the average holding size fell to 49 dunums (Fischbach 1990:27).

This research shows that land registration conferred title primarily on local people. 92% of land in the Ajlun district was registered to natives of Ajlun. The remaining 8% was owned by outsiders, but only a little of this was in large estates which had been purchased

during Ottoman times by non-TransJordanians. Even among these outsiders, contact with the local people was close, often on the basis of marriage (Fischbach 1990:26-27).

In the 'Allan area of the Belqa district north of Salt, land registration took place between 1942 and 1944. Wåhlin (1992:126-127) has established that there was extensive privatization of land, up to 81% in some villages. This land was often registered to family groups rather than individuals, and within this framework, land would be parcelled out among male descendants in accordance with local custom.

Land Reform Private Property

A profound effect of the land reform programme was the change that took place in the relationship between farmers and the land. The process of land reform resulted in the valorization of each parcel of land, some of which would have been worth more than others. This led inevitably to the differentiation of land values within and between communities (Firestone 1990:115 & 119). In TransJordan, the value of the land of most landowners was low. The Land Tax Law revealed that more than 70% of landowners paid less than £P1 in taxes:

TABLE 5: Distribution of Land Tax in Settled Villages, 1943

Owners Paying	Number	%
Under £P1	29,714	71
£P1-£P2	6,909	16
£P2-£P3	2,377	6
£P3-£P4	1,171	3
Over £P4	1,568	4

(Source:Konikoff 1946:90)

Although there was a majority of smallholdings in the lower tax bracket, the figures compare favourably with other Middle Eastern countries in this period. For example, Hinnebusch (1990:32) has argued that in Syria, from Ottoman times to the Mandate period, land was progressively concentrated in fewer and fewer hands. He suggests that smallholdings accounted for 75% of cultivated land in 1839, 25% in 1913, and 15% by 1945. The same did not happen in TransJordan.

To the extent that the creation of a large class of landowners was an objective of the land reform programme, it was a success. While land reform increased the overall quantity of land under cultivation, and the number of landowners, neither of these categories necessarily experienced a transformation in terms of either the quantity or quality of output, for reasons that are explained in Chapter Six.

2. The Sedentarization of the Nomads

The Mandate Period

The Ottoman Empire's primary concern had been to revive the agricultural sector of the economy in areas like TransJordan. Their policy towards the tribes was aimed either at containing them in the desert, or at least inducing them to register their land and having it farmed, even if they had to pay others to do the labour.

At the outset of the Mandate period, the British appeared also to have opted for the containment strategy toward the tribes, a policy decision reinforced by the disturbances in the period between 1921 and 1924 (see Chapter Four). Even so, the Tribal Administration Department was aware of the need to cultivate good relations between the Emir Abdullah and the leading sheikhs in order to strengthen his position. This strategy worked insofar as by 1923 the British did not need to engage in any large scale pacification operations against the tribes

Other factors led to a modification to the containment strategy after 1924. The protracted sequence of conflicts taking place between TransJordan and Saudi-based tribes in the Wadi Sirhan and Jebel Tubeiq reinforced the view that the desert was an arena of conflict. Furthermore, by the late 1920s and early 1930s, tribes were complaining that they were losing their livestock, either through rustling from the Wadi Sirhan, or from the effects of the drought. Camel prices also collapsed in the regionally important market in Cairo, further eroding the tribes' traditional source of wealth (Glubb 1938:449-454; Tell 1991:9).

The impact of these processes on the tribes' livestock numbers was severe. The figures supplied by al-Omosh for the Sirhan reveal the extent to which numbers of sheep and camels declined over a period of 60 years. The deprivations of the First World War are evident in these figures, but the Mandate period which followed also maintained the trend, which was not reversed until the 1940s.

TABLE 6: Sirhan Livestock Figures, 1880-1939

	1880 [1]	1924 [2]	1939 [3]
Sheep	19,000	6,500	3,000
Camels	11,500	800	380
Horses	1,100	65	24

(Source: al-Omosh 1991: 1:55; 2:73; 3:74)

In view of the scale of the decline of the pastoral economy that was occurring, the Mandate administration opted for a more deliberate sedentarization policy. One group that was singled out for attention was one of the poorest tribes in TransJordan, the Bani Hassan, who were settled on land west of the Hejaz Railway between Zarka and Jerash.

The Sedentarization of the Bani Hassan

Shwadran (1959:195) has remarked that 'the experiment with the Bani Hassan convinced the government that converting the nomad into settlers was its great modern mission'. In fact, the experiment with the Bani Hassan, at least in its early years, was a disaster.

The sedentarization began during one of the worst years of the drought which TransJordan had experienced in recent decades. Moreover, when the programme began in 1934, the Bani Hassan had not acquired any farming skills, nor did they have access to cheap labour or capital, with which to invest in the land.

The first reports of serious problems with the tribe were filed in February 1934, when it was stated that 1,650 at Zarka and 300 at Jerash were destitute. The crisis was so severe that the report was sent to London as part of a request by the TransJordan Government for approval from H.M.Treasury to spend £P1,090 on road works as an employment relief measure for tribesmen (Telegram from the High Commissioner to the Colonial Secretary, February 2nd 1934, CO 831 27/8).

A more detailed examination of the Bani Hassan situation followed in March 1934. In it the High Commissioner agreed with the recommendations of a special Relief Committee that had been set up. This suggested giving work to 400 men, which it was thought would support another 400. In seeing this only as emergency relief, the High Commissioner stressed that none of the Bani Hassan 'appear likely to perish of actual starvation at present', and he also recommended 'the replenishment of their flocks. This should provide the poorest families with a means of bare subsistence for the present and provide them with some basis of existence for the future; moreover, the capital cost of such measures would be less than the cost of direct relief' (High Commissioner to Colonial Secretary, March 12th 1934, CO 831 27/8).

The High Commissioner's recommendations did not stop necessary relief work from being provided, but by June 1934 Kirkbride was reporting:

> 'This year none of the Bani Hassan crops, apart from those on irrigated lands which form a small percentage of the whole, can be classified as better than fair and the greater part were either poor or total failures. I estimate that not more than a fifth of the arable land owned by the

> tribe was sown this season and the yield will be inadequate to feed the tribe until next harvest and to provide seed for the next sowing' (Kirkbride, Report to the British Resident, June 1st 1934, CO 831 27/8).

As a result, Kirkbride made his own recommendations to help the Bani Hassan, which involved tax remissions, seed donations, and relief work. He was opposed to any cash handouts, however, because he felt these would either be spent on luxuries or go to pay debts. Indeed, the serious indebtedness of the tribe and the great extent of their land, led Kirkbride to suggest that portions of it be given up altogether for he believed that 'the Bani Hassan possess more land than they can cultivate properly' (Kirkbride Report to the British Resident, June 1st 1934, CO 831 27/8).

Modifications to the Sedentarization Policy

The wretched experience of the Bani Hassan had one benefit. It led the Mandate administration to again alter its policy on sedentarization. By 1938 it was encouraging the tribes to maintain their flocks, as they were now seen as an important element in their economy (Annual Report 1938:319; Shwadran 1959:196).

One aspect of this sedentarization policy process, however, was of negative significance for many tribesmen, in the long term. Generally speaking, many of the tribes had registered land on the plateau but did not farm it themselves, paying labourers from TransJordan or Palestine to do it instead. For the poorer tribes who suffered most during the drought, there was insufficient capital or income to pay for labour, and lacking their own farming skills, the tribes could not really put the land to its best use. The policy was, in the short term, a failure.

Other tribes had a diversity of economic activity but also found that sedentarization created unforeseen problems. The Sirhan, for example, had a complex division of labour which included sheikhs, warriors, merchants, and pastoralists. The two groups who lost out in the Mandate period were the merchants and the pastoralists. Both found that their traditional access to areas outside TransJordan was cut off by international boundaries, or by the uneconomic nature of trade in Syria and Saudi Arabia where new taxes reduced the margin of profits. These two groups also lost out owing to land reform in TransJordan as it was the sheikhs and the military men who acquired most of the best quality farming land. As a consequence, the inability of the poorer members of the tribe to earn a living from the land drove them out of their traditional areas to seek work elsewhere, for example, in the Desert Patrol (al-Omosh 1991:91-95).
Over the course of the Mandate period, the tribes were brought ever closer into the orbit of the central Government in Amman, and existed in a relationship of dependency to it.

They were dependent upon the Government for relief work during the drought, and, eventually, as a source of employment in the armed forces. Although elements of the tribes were able to recover in the 1940s, the pastoral economy of a desert-based existence could no longer be sustained in its old form. The tribes became completely integrated into the emerging state of TransJordan, and this is true at every level, from the economic to the political.

CONCLUSION

The reform of land tenure was an important part of the general attempt to make agriculture the basis of TransJordan's economy. The creation of a large class of landowners was designed to create incentives among farmers and landowners that would increase agricultural output. The consequent rise in output would feed the population, and provide the administration with tax revenues that would help TransJordan 'pay its own way'.

To some extent, the land reform programme was a continuation of the Ottoman Land Code of 1858. The idea of individual landownership was not a novelty in 1928. Rather, the British invested more time, money, and professional expertise in land reform.

In terms of land-use, more land was brought under cultivation, particularly in the Belqa, where land had been used for the grazing of livestock. Collective land tenure, or '*Musha*' was actively broken up, and as a result of land settlement, there was a higher percentage of individual landowners in TransJordan than in some other Middle Eastern countries, though the size and value of their plots was small. There were negative aspects to these changes. Although a large proportion of the population now owned land, they were also chronically in debt. This incidence of debt made the margin of returns from farming quite small, thereby reducing the incentive to farm, the original purpose of the land reform programme.

Similarly, the ambitious attempt to sedentarize the nomadic tribes, was, on one level, a success. That is, more and more tribes left the desert to seek a living in the sedentary zone, yet most were forced out of their traditional lands by poverty. Also, when they arrived in the sedentary zone to begin a new life as farmers or landowners, they were accompanied by a drought which eroded any short-term benefits that might have been derived from agriculture.

At the outset of the Mandate period, agriculture was conceived of as the great provider, but also as a self-regulating sector..By the late late 1920s and early 1930s, it was clear that a protracted drought was hindering economic growth, and that Government

intervention would be necessary. The background to these events, and the measures that were taken to improve agricultural production, will be discussed in the next chapter.

NOTES

1. According to Sluglett & Farouk-Sluglett (1984:413) this aspect of the Land Code was a success in the Greater Syria region. Tax receipts increased 'from 426 to 718 million Piastres between 1887 and 1910'.
There is also evidence that under cultivation, land values increased. According to Kark (1984:381), the land that was cultivated by the German protestants in Palestine increased in value from £300,000 in 1898 to £800,000 in 1913.

2. However, the British Military Officer stationed in Amman, Captain Brunton, disagreed on this point. See Brunton [Amman] to William Deedes [Jerusalem], December 3rd 1920, SAC/Brunton Papers.

CHAPTER SIX

AGRICULTURE AND THE ECONOMY II: RESOURCE MANAGEMENT

INTRODUCTION

In the previous chapter it was argued that at the outset of the Mandate period, agriculture was acknowledged to form the basis of TransJordan's economy. But it was also seen as a self-regulating sector, with its own rhythmns and mechanisms.It was a sector in which the scope for government intervention was limited. This view began to change in the early 1930s as the protracted drought forced the Government to review its policy on agriculture. This chapter will assess the measures that were taken to influence agricultural production, and thus to stimulate TransJordan's economy.

1. The Policy Background

1921-1933

Although most of TransJordan's agriculture was rain-fed, in the early years there seemed to be little anxiety among officials concerning the impact of the country's erratic rainfall patterns on farming. This can be explained by the relatively stable rainfall pattern at the beginning of the Mandate. Soon after the new regime under Cox was established in 1924, however, TransJordan began to experience a cycle of poor rainfall years which lasted until the mid-1930s.

At the policy level, Cox and his staff were ill-equipped to cope with the resulting failure of agriculture. They had no specialist knowledge of agriculture, and of the problems of variable rainfall patterns in dry regions like TransJordan. The closest expert knowledge to hand was with a few officials of the Palestine Government. It is also the case that while many people experienced hardship, in the late 1920s, drought was often localised in certain areas, while in isolated years crops were relatively good. Drought, therefore, was seen as a potential hazard rather than a chronic problem. It is also the case that governments did not take easily to the view that they had a role to play in economic affairs. In June 1930, the junior Minister at the Colonial Office, Dr Shiels, was asked in the House of Commons if the Government was investigating 'the possibility of greater agricultural development in TransJordan and the closer settlement of the nomadic peoples'. The answer was negative (Dr Shiels [Labour], reply to Major Elliott [Unionist], June 19th 1930, Hansard 240:c595).

Nevertheless, it was in 1930 that Government policy toward economic intervention began to change. The first indication of this came with the Colonial Development Act

of 1929, which created a Colonial Development Fund, with an annual budget of £1 million. The fund was administered by the Colonial Development Advisory Committee [CDAC], and was to finance development projects in the Colonies that would use UK resources and manpower (Morgan 1980:49; Meredith 1975:486-487).

In 1930 the TransJordan Government applied to CDAC for money to finance two projects, the construction of a water tank at Mafraq, and the construction of a telephone link from Amman to Ma'an. Both projects were rejected by CDAC on the grounds that they fell within the remit of the TransJordan Government's existing obligations (Letter from CDAC to the Colonial Office, February 2nd 1931, CO 831 15/2).

1933 and the Formation of the Economic Committees

The situation in the countryside worsened in the early 1930s, so the need for a review of policy was expressed in London and in Amman. In the Colonial Office, Cosmo Parkinson expressed his disappointment with the rate of development in the country when he wrote:

> 'as far as I can see there is no getting away from the fact that TransJordan is not coming on as one would wish in the case of a British Mandated territory. We have of course kept the place going and spent quite a lot of money year by year, but that is not the same thing as developing the place' (Parkinson to High Commissioner, February 28th 1933, CO 831 24/6).

Parkinson took the view that a fresh attempt should be made to extract money from the Colonial Development Fund to help the agricultural sector. It was pointed out that CDAC was best approached with projects that were not normally a part of Government obligations, and that they should be carefully costed and presented. Cox's response was illustrative of the difficulties he had in accepting that the Government could interfere in what was, he believed, a problem endowed by nature:

> 'What we really lack is rain and the reason for the present straitened circumstances of the people is the succession of dry years which we have suffered. To say that the Fellaheen are starving is a gross exaggeration, they are however very hard up but three or four good years would put them on their feet again' (Cox to High Commissioner, April 7th 1933, CO 831 24/6).

But in Amman, some TransJordanians took a different view. In the summer of 1933 two political parties held public meetings at which Government policy was criticised. In June, the 'TransJordan Congress' passed resolutions which called on the Government

to take specific measures to improve the situation in the countryside. They wanted the Government to begin work on a Ghor irrigation scheme, and to see an increase in the funds of the Agricultural Bank which would enable it to offer more loans to farmers. In July, the Hizb al-Tadamoun ('Solidarity Party') was also critical of Government policy, and wanted to see more tax remissions for farmers in distress. But where the TransJordan Congress called for an injection of Arab capital into TransJordan, and for concessions to be granted only to Arabs, the 'Solidarity Party' restricted itself to a more general call for an injection of 'foreign capital' to improve the situation (Report on the Meeting of the 'TransJordan Congress', by RAF Special Services Officer, June 1933; Political Situation Report, July 1933, FO 371 16926).

As a consequence of these agitations and the economic distress of which they were a symptom, Abdullah, with the agreement of the High Commissioner, formed an Economic Committee, made up of leading Arabs. Convened in November 1933, the Committee was given three months to produce recommendations on ways of improving conditions across the agricultural, health, and education sectors (High Commissioner to Secretary of State, November 18th 1933, CO 831 24/6) [**1**].

H.M. Treasury were not happy with the formation of the Committee, which would inevitably recommend the expenditure of money. They also complained that they had not been given advance warning of the Committee's deliberations, and were concerned that the Committee had no British officials who would recommend restraint on financial matters (Minute by Blaxter, March 2nd 1935, CO 831 34/8). Nevertheless, the Committee did seek the advice of British officials, such as R.Shepherd, Irrigation Officer of the Palestine Government, and F.A.Stockdale, whose report on crops to the Committee was to prove influential in later years.

The views of these officials as well as the work of Abdullah's Committee became part of a more concerted effort to review agricultural policy in TransJordan. Where at the outset of the Mandate agriculture was approached with an extreme form of 'laisser-faire', by the mid-1930s, prompted by the drought, Government was intervening across the whole range of agricultural activities in an attempt to improve cultivation and increase output.

What will now be assessed are the measures that were taken to improve the management of the country's agricultural resources. This assessment will focus on: i) the exploitation of water resources; ii) the control of pests and plant disease; iii) the provision of agricultural inputs such as seed, agricultural machinery, and agricultural training; iv) the management of livestock resources; v) forestry and soil conservation, and vi) agricultural credit arrangements.

2. The Management of Agricultural Resources

i. The Exploitation of Water Resources

a) Rainfall: General Considerations

For most of its existence, TransJordan has relied upon rainfall as its principal source of water (Casto & Dotson 1938:122). Perennial streams and groundwater sources tapped by wells have been exploited. Until recent times, irrigation has been limited to spring-fed earth canals, though remnants of an ancient 'Qanat' tunnel-irrigation system were discovered in the Jordan Valley in the 1930s (Ionides 1939:163-164; Mackenzie 1946:270). This dependence upon rainfall created hazardous conditions for agricultural production in TransJordan. Three features need to be taken into account here: climate, TransJordan's topography, and the rhythmns of the rainfall season.

Most of the cultivated zone centred on the east bank plateau has a subhumid climate typical of the eastern Mediterranean region. This climate produces a short rainy season between October and March. Summers are long, hot, and except on freakish occasions, entirely without rain. This climate dominates the cultivated zone, apart from the more humid conditions in the Jordan Valley.In the eastern marches of the plateau,the arid conditions associated with the desert are more common. The higher altitude areas of the plateau receive the highest rainfall, averaging 300mm per annum, rising to 500mm and more in a few places. The more southern areas of the plateau, however, do not receive much more than 200mm per annum.

Furthermore, the high rate of evapotranspiration from the soil limits the variety of crops that can be grown, and is one reason why so much of the cultivated land is given over to the production of quick-yielding cereals and vines. As the soil dries out, erosion is a threat if conservation measures are not routinely practised (see Forestry and Soil Conservation, below).

b) Rainfall: The Mandate Period

Records of TransJordan's rainfall were known to have been kept in the late Ottoman period, at stations in Irbid and Ma'an, but were destroyed or lost during the First World War (Konikoff 1946:15; AbuJaber 1989:13).

During the Mandate period, rainfall statistics were first collected from 1921 onwards, by the RAF at their aerodrome at Marka, near Amman (Konikoff 1946:15), though these early records have not been found. In his hydrographic survey, Ionides (1939) used RAF statistics beginning in the year 1929-1930. Towards the late 1930s, rainfall gauges were set up at numerous locations across TransJordan, in schools, at RAF

stations, police posts, and at the agricultural experiment stations that were set up in this period (Ionides 1939:266).

However, there is no complete and accurate [2] set of rainfall statistics for the Mandate period as a whole. If the partial statistics that do exist are combined with the anecdotal evidence, the profile that emerges suggests that at least from 1924-1936, conditions in TransJordan were close to, or characterised by, drought. Drought occurred in occasional years after 1936.

For his survey, Ionides (1941:244) analysed the rainfall statistics available for Jerusalem over a period of more than 75 years, and compared them to the more limited statistics he had collected from TransJordan in the Mandate period. He argued that for the years 1890-1899, Jerusalem's mean annual rainfall was 31 inches, whereas for the period 1920-1929 it was 19 inches, a fall in quantity of 25%. [sic] If a similar variability is assumed for TransJordan's rainfall pattern, it follows that conditions for cultivation were exceptionally difficult in this period.

Moreover, the evidence suggests that the years 1930-1936 were worse than the late 1920s, underlining the difficulties that were faced by cultivators even in those areas of TransJordan lying inside the 300-500mm rainfall belt. If conditions for cultivation were difficult in the most fertile areas of the plateau, in the Ajlun and Belqa districts, and on the Kerak plain, conditions in the marginal zones of those districts bordering on the Hejaz Railway must have been almost impossible. These conditions proved to be a major obstacle in the sedentarization of the nomadic tribes, and of the successful transition of grazing land into farming land, which was underway at this time.

Official reports, and other sources, suggest that the downturn in agriculture began in the mid-1920s, though this is also the period when more detailed reports were compiled for the Colonial Office and the League of Nations. Apart from four relatively good years for most (but not all) of the plateau, in 1926-27, 1928-29, 1929-30, and 1934-35, rainfall conditions were reported to be below normal. This resulted in conditions of drought.

In the drought years, crop yields were so poor that the export of grain was prohibited to protect domestic needs. Prices for basic commodities tended to rise, and farmers impoverished by failed harvests had their taxes remitted (Annual Report 1925:62; Annual Report 1926:72-73; Annual Report 1928:79-80; Annual Report 1931:171).

In some of these years the rainfall distribution was marked less by wholesale drought and more by localised drought. For example, in the rainfall year 1927-28 the rains failed mainly in the north-east of the cultivated zone, and in the area around Kerak (Annual Report 1928-99). In the rainfall year 1931-32 when most of the Ajlun district

escaped drought, the areas towards the desert fringe on the lands settled by the Bani Hassan experienced failure. Also in this year there was a complete failure of crops at Madeba and Tafila. Yet a little to the north, in the Kerak area, crops were reported as just below normal (Annual Report 1932:226-227).

Anecdotal evidence confirms these trends. Seccombe (1987:116) argues that the drought conditions of the late 1920s and early 1930s were one factor causing the out-migration of families from north-western Jordan. A visitor to TransJordan in 1936 was forcibly struck by the poverty he encountered in a village near Amman (Gibbons 1936:263-268). On the marginal lands at al-Muwaqqar, south-east of Amman, set aside for the sedentarization of the Khreisha, conditions were exceptionally difficult. Hiatt (1981:165) observed that 'Because of climatic conditions, harvests had been negligible for the years 1924, 1926, 1927, 1929 and 1930, and non-existent for 1925, 1928 and 1931'.

The evidence from the agricultural reports for the period also suggests that rainfall not only fluctuated in intensity from one year to the next, but could cause other problems when it fell in intensive storms. Short bursts of rain could be as damaging to the agricultural cycle as no rain at all, by the damage it did to fragile soils. In particular, inadequate terracing on the escarpments, and the primitive earth canals used for irrigation systems, resulted in chronic rates of seepage and eventual run-off washing away soils during torrential rainfall.

The succession of poor years in the 1920s and early 1930s, led the Economic Committee to recommend that actions be taken to improve the available water supplies for agriculture, in line with the applications to the Colonial Development Fund that were being pursued in the aftermath of Parkinson's letter of February 1933.

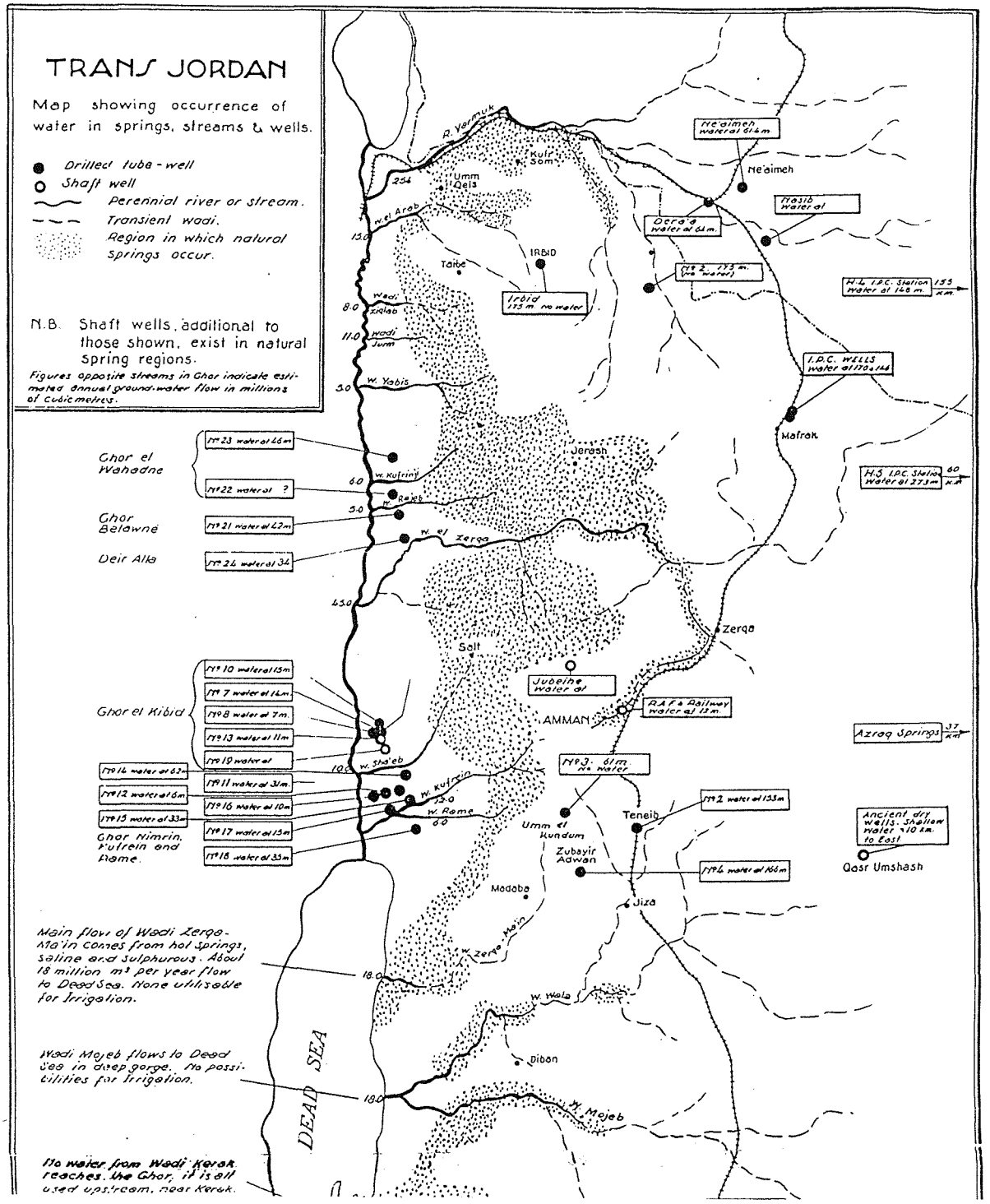
This new emphasis on water resources development was approached from two angles: the exploitation of known groundwater sources through water bores at selected sites. These sites were either on the margins of the cultivable zone where land was set aside for the sedentarization of the nomads, or in those areas of the desert where water resources were known to exist. Sites were also identified in the Jordan Valley in areas where land had cultivable potential (**Maps 6a & 6b**). The other approach was through small-scale irrigation projects. Here, the emphasis was on improving existing irrigation systems rather than developing new ones.

c) Water Bores

The Government-sponsored projects to bore for water in TransJordan were undertaken primarily to assist in the sedentarization of the nomadic tribes. These bores were at Teneib, Remtha, el Hafire near Qatrani, and at Black Rock. They were also a

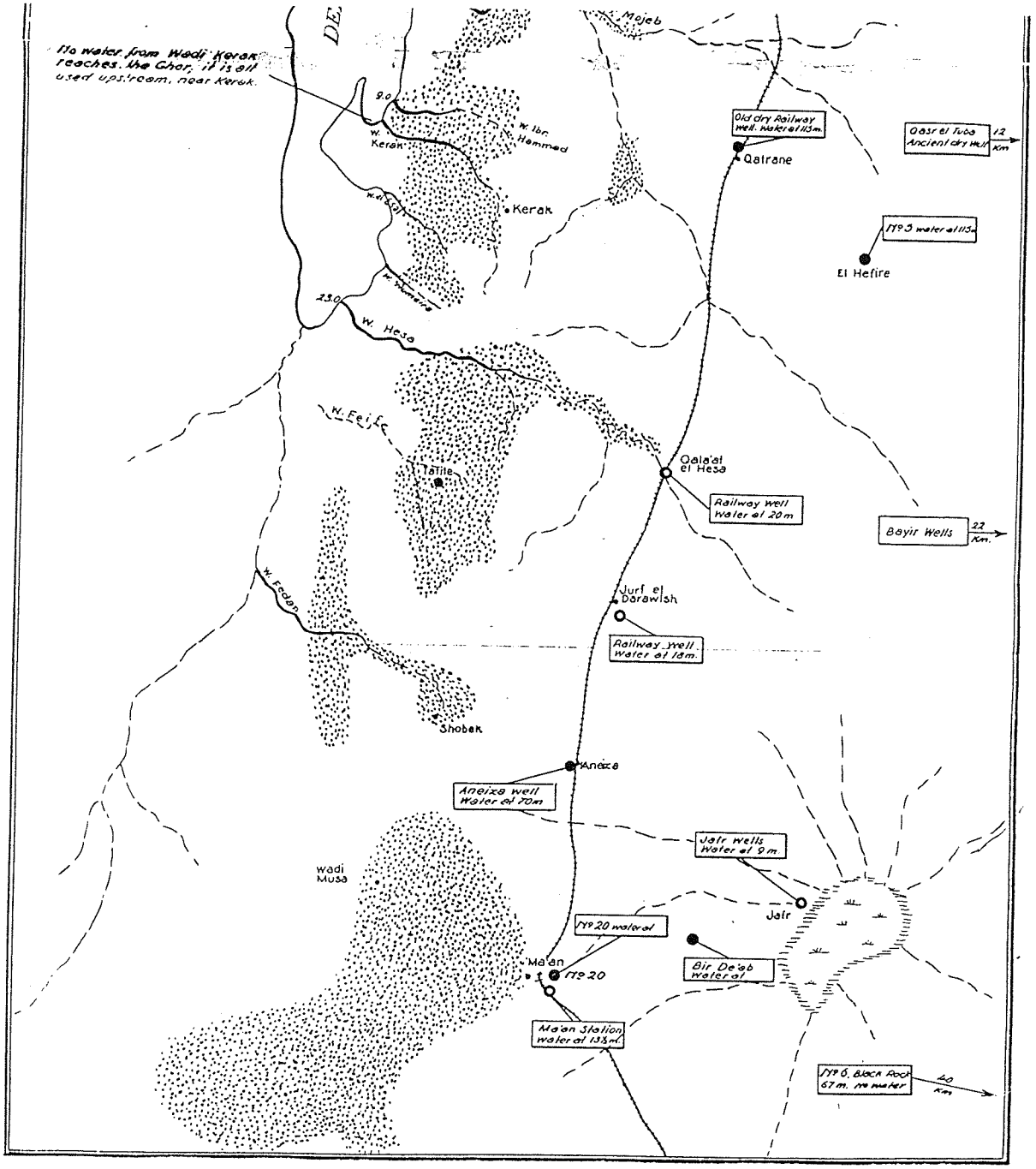
recognition that if the sedentarization policy was to be a success, new cultivators needed new sources of water. Although the water was primarily to be used for sedentary livestock grazing, it was possible that some cultivation would also be undertaken, and that this would produce marketable crops. It was also hoped that the success of such bores would encourage other landowners to finance their own water bore schemes (Application to CDAC, enclosed in the despatch from the High Commissioner to the Secretary of State, August 19th 1933, CO 831 24/6).

Other bores were sunk at the request of private landowners, at Umm el Kundum, and Zubayir Adwan [**MAP 6a**].. Other bores were operated by the Hejaz Railway Company, and the Iraqi Petroleum Company These two companies operated bores for the benefit of their workers, rather than for cultivators or shepherds. Bores were also sunk on the Emir Abdullah's land at Ghor el Kibid in the Jordan Valley. The first two Government sites that were selected for bores were at Teneib and Remtha.



Map 6a TransJordan: Water Resources

Source: IONIDES 1939



Map 6b TransJordan: Water Resources

Source: IONIDES 1939

The Teneib Bore

The progress in establishing the bore at Teneib is well documented and the range of problems it encountered is informative of operating conditions on the desert edge at the time. The first of these problems was with the machinery that was supplied to prepare the ground and drill for water. A Carden Loyd tractor was delivered to the site on June 13th 1934, but broke down four days later. An engine from Blackstone's of Stamford to power drilling also broke down. Cox wrote to the Crown Agents to complain that neither the tractor nor the Blackstone's engine came with sufficient instructions to deal with breakdowns (Cox to Crown Agents, August 18th 1934, CO 831 30/2).

At the time that Cox initiated this correspondence, it had been possible to sink the bore to 130 feet, but no water had been found. Following repairs to the machinery, drilling continued and by early 1935 water was struck at 533 feet. The yield was 1,440 gallons per hour, and the water quality was reported as sweet (High Commissioner to Secretary of State, January 19th 1935, CO 831 33/1).

Even after the initial discovery of water, the Teneib bore was beset with problems. The TransJordan Government was asked by the Crown Agents to undertake a series of tests to determine carbon dioxide levels in the bore and the water. These requests led to serious delays in making the well available for use. The TransJordan Government had not carried out such tests before, and delays were caused when the early results were queried by staff of the Palestine Government even though they were, in fact, accurate. The TransJordan Government's bacteriologist at one point fell ill, and some precious metals used for testing in the bore were stolen (High Commissioner to Crown Agents, April 1935, CO 831 33/1; High Commissioner to Secretary of State, July 13th 1936, CO 831 38/1).

Correspondence on these delays revealed a deep sense of frustration among TransJordan's officials at Crown Agents' demands, particularly when the privately-managed bores, such as the IPC bore at Mafraq went ahead and were operating. The anxiety among officials like Cox was that such delays were a poor example to the tribes they were intending to sedentarize (Cox to Crown Agents, August 12th 1936, CO 831 38/1).

Further delays occurred in 1936 when a new pump had to be purchased and installed at the bore. It was not working until 1937, whereupon the bore yielded 1.5㎥ per hour. Continuous pumping began in April 1938 but by August the output had been reduced to 1.1㎥ per hour because of siltation (Ionides 1939:355). It was not until the early 1940s,more than six years on, that an experimental nursery was opened on the site (O.S.Morgan [American University of Beirut] to F.Winant [MESC, Cairo], December 28th 1942, FO 922 98).

The Bores at Remtha, Umm el Kundum, and Black Rock

To compound the unpromising start to the groundwater extraction programme, the bore sunk at Remtha proved unsuccessful, though drilling went ahead quicker than at Teneib. The derrick for the Remtha bore arrived from Dera'a on November 24th 1934, it was erected on the 29th, and the maximum depth of the bore at 600 feet was reached two months later. No water was struck (High Commissioner to Secretary, April 25th 1935, CO 831 33/1). Geological advice suggested that a further 200 feet would have to be bored, but that this was unlikely to yield any water. The project was abandoned as geologically unsuitable.

The bore at Umm el Kundum, originally requested by the landowner, was begun in 1935. Water was estimated to lie at a depth of 800 metres, but drilling was abandoned at 60 metres because of the unsuitability of the geological conditions (Ionides 1939:356). Similarly unsuitable conditions for drilling were met in 1937 at the bore at the site just north of Black Rock. This project was abandoned. (Ionides 1939:359).

The Bores at Zubayir Adwan, el Hafire, and Ghor el Kibid

The bore at Zubayir Adwan, in contrast, was successful. As at Umm el Kundum, the landowner asked for a bore to be drilled and was prepared to fund it. This allowed the bore to be completed more efficiently, because it was not subject to Crown Agents' stipulations. The bore struck water at 185 metres in December 1935, and yielded 1c.m per hour. In November 1937 the bore was deepened a further 10 metres but this failed to increase the water yield (Ionides 1939:357).

The bore at el Hafire, near Qatrani was also successful. The bore was started in May 1936 and fourteen months later water was struck at 377 feet. There was then a delay caused by the lack of a pump, which was not purchased -with extra funds from CDAC- until 1938. When it finally went into operation the supply met the needs of the livestock herded in the area. Water could be pumped from high summer until the onset of the rains in November, and was available for 12 to 14 hours a day with no sign of diminution of supply (High Commissioner to Secretary of State, January 30th 1937, CO 831 42/4; Ionides 1939:358).

Shallow bores on Emir Abdullah's land at Ghor el Kibid in the Jordan Valley were much more easily opened up than those on the eastern flank of the plateau. In one case a bore was dug to a depth of only 12 metres before yielding 6c.m per hour (Ionides 1939:360). Two more bores were opened on the Emir's land in 1939 (Monthly report for October 1939, CO 831 51/8).

The plan to open up new groundwater sources on the desert fringe through water bores met with limited success. Of the six projects, three were successful, and were very useful for maintaining livestock and light agriculture. However, as a response to the drought and as an aid to sedentarization, the bores were of limited effect. For example, a Colonial Office secretary estimated that the stipulations of Crown Agents on the testing of water had delayed the successful start of the Teneib bore by over 18 months (Minute by Blaxter, February 26th 1937, CO 831 42/4).

d) Irrigation

Introduction

During the Mandate period of the 4.6. million dunums of cultivated land on the plateau, only 260,000 dunums were irrigated (Konikoff 1946:30). These areas were fed primarily by earthen canals in the Ajlun district along the courses of the Wadi el Arab and the Wadi Ziqlab where springs and perennial streams could be tapped, and where rainfall could be trapped in cisterns. Also, the Bahai community at Adasiya appear to have constructed a dam and canal system. There were canals along the Wadi Shoeib in the Belqa district, and at Ghor el Mezraa and Ghor el Safi in the Kerak district.

The TransJordan Government does not seem to have given any policy consideration to an extension or improvement to irrigation until the early 1930s, as a consequence of the drought. The Economic Committee in its report of 1934 made a number of recommendations with regard to irrigation. These ranged from improvements to existing canals, the creation of new ones, and the exploitation of water resources in the 'Shera' region of the south where a cattle farm was also proposed. The Committee recommended the expenditure of £P100,000 over 10 years. Other recommendations were made in the wake of the hydrographic survey in 1938 but little advance was made on them before 1946 for reasons that will explained below.

The Potential for Irrigation

The irrigation schemes which existed in the early years of the Mandate in TransJordan were primitive. Because most canals were made of earth with gravel-lined beds they tended to seep badly as there was no protective casing on their walls. In 1934, Shepherd estimated that owing to poor canalisation, water loss from the Wadi el Arab amounted to 30 to 40 per cent of the supply 'for every 2 km of length to a distance of 7 or 8 km' ('Extracts from a Report by Mr Shepherd', March 1934, CO 831 33/9). Similar problems in the Belqa district were noted by F.A.Stockdale the following year. He estimated that if the loss of the water from an area like the Wadi Shoeib could be retrieved, up to 50 per cent in increased production of crops could be obtained. He

added, 'There are definite possibilities of development if the existing irrigation schemes are improved and others established' (Report by Mr F.A.Stockdale on a Visit to Palestine and TransJordan, July 29th 1935, CO 732 72/3).

Notwithstanding these primitive canals, there had been an expansion in output from the irrigated areas, particularly from the mid-1930s onwards when there was an improvement in the rainfall levels. The volume of vegetables and bananas that were grown for the domestic market on irrigated land increased. Bananas were viewed as having potential for both the domestic market and for export to Palestine where output was lower than in TransJordan. The Jordan Valley, where most of the potential for irrigation lay, was considered to be ideal for banana cultivation. Other irrigable crops that were considered to have commercial value were lucerne, potatoes, grapefruit and deciduous fruits ('Note on Crops Grown in TransJordan Under Irrigation and Possibilities for Development', Colonial Office Memorandum, October 23rd 1935, CO 831 33/9).

Water Rights

Improvements to irrigation in TransJordan were hindered by problems in the resolution of water rights. A typical complaint came from cultivators in the lower reaches of a Wadi, whose access to water was being restricted by cultivators closer to the headwaters. It was clear in the early 1930s, that in addition to the practical problems involved in extending irrigation, a legal solution to water rights acceptable to cultivators would have to be found (Walpole 1944:167-18). It is also the case that the Rutenberg Concession, which led to the creation of the Palestine Electric Corporation, gave the firm priority use of the waters of the Jordan and Yarmouk Rivers. This hindered the development of any major irrigation scheme for the Jordan Valley that might have been proposed (see Chapter 4). Water rights legislation was not finally passed by the TransJordan Legislature until 1946, shortly after the onset of independence (FAO/Caponera 1954:137-145) [**3**].

Improvements to Irrigation

The emphasis on improvements to the canals was made on the grounds that if the farmers could be persuaded to change their behaviour, the better management of water resources would surely follow. Small-scale irrigation developments were needed, as TransJordan did not possess the amount of capital that would be required for investment in major irrigation schemes, such as had been called for in the resolutions of the TransJordan Congress in 1933. Ionides even advised against major schemes. He stressed that the focus of policy should be on small schemes, and related to socio-economic issues:

> 'The Government's efforts and expenditure must be concentrated upon providing the stimulus to individual effort such as is already being done through land settlement and education. Money spent on actual works can only be a pin-prick on the map; land settlement, education, and agricultural services will tint the whole sheet' (Ionides 1939:10).

Ionides also suggested that even if private enterprise was invested in TransJordan's agriculture, it would have to be small-scale and oriented towards cheap, market-oriented schemes with much of the investment in machinery such as motor pumps.

The rest of this section will look in more detail at the schemes that were begun to improve irrigation on the Wadi el Arab, the Wadi Ziqlab, and at Ghor el Safi.

The Wadi el Arab Scheme

In March 1938 the TransJordan Government applied to CDAC for a loan of £20,000 to increase the agricultural output of the irrigated land on both sides of the Wadi el Arab by improving its water distribution system ('Extracts from a report by Mr Shepherd', March 1934, CO 831 33/9).

In their deposition to CDAC, the authorities painted a favourable picture of the existing system as an argument for its further improvement. It was already irrigating 4,000 acres, in a fertile area with an average rainfall per year of 300mm. It was also close to markets in Palestine. The two problems which it was proposed the scheme would deal with were improvements to the canals, many of which were in a state of disrepair, and a fairer means for dividing water among the cultivators. Cultivators furthest from the headwaters complained that they were being deprived of their share of water (Application to the Colonial Development Advisory Committee for Additional Financial Assistance for the Development of TransJordan, March 1938 CO 831 47/9).

The plan was to introduce one main arterial canal and numerous feeder canals located at points agreed to by cultivators. These canals would be lined with concrete and would follow the contours of the land in order to reduce pumping costs. To obtain a more equitable distribution of the water, several 'division weirs' and 'rotation points' would be constructed.

In their response, CDAC did not question the validity of the application and agreed the £20,000 in 1938. But the first instalment of £4,000 was agreed only on condition that the TransJordan Government introduce legislation to sort out the conflict over water rights (Smith [CDAC] to Colonial Office, May 2nd 1938, CO 831 47/9). But in 1938 the proposed Water Law was still only at the draft stage (High Commissioner to Secretary of State, August 19th 1938, CO 831 47/9).

Even though CDAC had agreed on the loan in 1938, little progress was made on the scheme during the Mandate period. The reason given was that the Department of Development had no time to work on it. Also, conditions in the Jordan Valley were considered to be dangerous. It was reported in 1938 that there had been 12 incursions into TransJordan from Palestine, and that as a result, three members of the hydrographic survey team had been killed (Chapman to Government Office, Jerusalem, December 1st 1938, CO 831 47/9; Annual Report 1938:309). Mitchell in 1939 could merely report that 'circumstances have not yet permitted a start to be made' (Report on the Department of Development, 1939, CO 831 52/4).

The lack of skilled staff was one of the main reasons why a more prompt start to the Wadi el Arab scheme was not made. The scheme was handled by the Department of Development, which was the smallest department in the Government. The resignation by Ionides in the spring of 1939 reduced the department to only skeleton staff (Cox to High Commissioner, March 7th 1939, CO 831 52/3).

The Wadi Ziqlab Scheme

The loan application for the Wadi el Arab was followed by another for a similar scheme on the Wadi Ziqlab. Less ambitious than that for the Wadi el Arab, CDAC supported this scheme at a cost of £3,500 over 6 months, but again on condition that the TransJordan Government pass a water law before any funds were released. But no work had begun on the scheme by June 1940 owing to the 'disturbed conditions in the Jordan Valley'.At that time the High Commissioner did not consider either of the schemes to be urgent (Minute by Luke, June 1940, CO 831 52/6).

The Ghor el Safi Scheme

Some progress had been made on expanding the irrigation at Ghor el Safi, south of the Dead Sea by the early 1940s. The aim here was to develop more irrigation by tapping the waters of the Wadi el Hasa where it enters the Ghor. An existing irrigation scheme provided water for both the cultivators at Ghor el Safi and Palestine Potash Ltd which had a plant at the southern end of the Dead Sea. A scheme to expand this irrigation was delayed by an unspecified disagreement between the municipality of Ghor el Safi and the Potash company. In late 1939 it was reported that the Department of Development had taken control of the new scheme, and in 1940 the project was revived (Quarterly Report ending December 31st 1939, CO 831 51/7; Quarterly Report ending March 31st 1940, CO 831 55/7).

The main feature of the new scheme was the refurbishment of the existing canal system, which would supply more water for irrigation. Part of the funding for the scheme was to be provided by Palestine Potash Ltd, who invested up to £2,000 for the

work on the canals (Keen 1946:84). Considerable benefits flowed from this investment. By 1943 an extra 20 per cent of land had been opened up to cultivation in the Ghor el Safi area.

The conflict over water rights which delayed much progress on irrigation in TransJordan, was avoided at Ghor el Safi by an arrangement which allowed the Department of Lands and surveys to decide how to share the waters between the inhabitants of Ghor el Safi and Palestine Potash Ltd (Worthington 1946:60-61).

In sum, there was no significant expansion in the amount of land under irrigation across TransJordan in the Mandate period. The Economic Committee made wide-ranging recommendations but only a few of these were acted upon. Some minor improvements to existing canals were made, and schemes such as this certainly increased productive capacity at Ghor el Safi. However, the development of new irrigation systems did not progress sufficiently to boost output in the cultivable areas of Ajlun. The capital needed for such long term irrigation development was not available to the TransJordan Government at this time. There was a manpower shortage in the Department of Development, which had overall responsibility for irrigation; and the failure to resolve water rights legislation was also an obstacle to progress.

ii. The Control of Pests and Plant Disease

Introduction

TransJordan, in common with other parts of the Middle East, often had to deal with agricultural pests and plant diseases. The most serious threat to crops came from locust swarms of which there were damaging plagues in the late 1920s and early 1930s. Crops could also be damaged by field mice, and by insects, but plant diseases do not appear to have been so pernicious.

The TransJordan Government, under Article 20 of the Mandate, was obliged to meet any recommendations that the League of Nations might propose to combat pests and plant disease.An international body was formed to coordinate responses to locust swarms in the Middle East, but in TransJordan there was no formal mechanism for the control of pest and plant disease [**4**]. Rather, the Administration relied on *ad hoc* cooperation from farmers and troops who could be mobilised as necessary. In this section, the attempts to combat pests, and plant disease will be examined.

The Campaign Against Locusts

Plagues of locusts and field mice often caused damage to crops and were costly to deal with, but preventive measures were beyond the remit of Government. Locust invasions in particular were damaging in two respects. Not only did they directly threaten crops,

but the ploughing up of land which took place after a plague in order to destroy any eggs that the swarm had laid was also a time-consuming and costly operation [**5**].

Locust plagues were reported for every year from 1927 to 1932. That in June 1927 had caused no serious damage (Annual Report 1927:79) but in 1928 there were two invasions. The first swarm in February affected the area south of Ma'an but was 'blown away' by strong winds and caused no damage. A second, more intense invasion took place 20 km from Amman in May. The swarm gathered in a 16 sq km area but prompt action ensured that apart from the ploughing up of some cultivated land, no serious damage to crops took place. The techniques that were used included the use of flame-throwers and poison, and locusts were collected in sacks and burnt (Situation Report for the Quarters January 1st-March 31st 1928 and April 1st-June 30th 1928, CO 831 1/2; Annual Report 1928:110).

A more serious invasion took place in January 1929. A swarm gathered in Aqaba, and had spread north around Ma'an, into the Jordan Valley, and in the escarpment area west of the plateau. Owing to the scale of this swarm, and the lack of resources to deal with it, the operation on this occasion had to be coordinated with the Department of Agriculture in Palestine. The campaign lasted until June 1929 and though no serious damage to crops was reported, the estimated cost of the operation was £10,000 (Quarterly Reports for January 1st-March 31st 1929 and April 1st-June 30th 1929, CO 831 5/9; Annual Report 1929:162-163). There was an additional loss to the exchequer as farmers whose crops were damaged by the anti-locust campaign were entitled to a remission on their taxes.

Another locust invasion in October 1929, which was initially reported to have been contained, became a serious problem for the ensuing seven months. An operation as intense as that mounted earlier in the year was put into effect and again, no serious damage to crops was reported (Annual Report 1929: 195). However, because taxes to farmers were again remitted, and because troops of the Arab Legion who would normally help collect taxes in the known 'difficult' areas went on to anti-locust work instead, the overall financial cost was probably higher than the figure quoted, which was £22,000. Nor was it possible to cost the drain of human as well as financial resources away from agricultural production:

> 'The anti-locust campaign fully occupied all the personnel and resources of the Department of Agriculture for six months, as well as many officers of other Departments and practically all the able-bodied men of the threatened areas' (Annual Report 1930:217).

Despite this problem, the rainfall year 1929-30 was better than average and the crops were good. The situation in 1931, when there was a sudden invasion of locusts in the

south, was more costly. Unlike 1930 when the rains had been good, 1931 marked a return to the failure of the rains as in previous years. On top of this a swarm of locusts suddenly moved into TransJordan from the south-east and in a 36-hour period caused widespread damage to the parched crops in the area between Ma'an and Kerak. The cost of this invasion was high and included £12,178 in tax remittances and £10,000 in special agricultural loans to provide emergency support to farmers. The additional cost of the operation to clear the affected areas of eggs was not disclosed (Annual Report 1931:171).

In 1932 swarms were contained when they attacked between January and March but no serious damage was reported (Annual Report 1932:228) and no serious attacks were reported in later years.

The locust invasions were undoubtedly the most serious of the pests encountered by the Department of Agriculture. The campaigns against them required the deployment of large numbers of farmers and troops. In the period between 1929 and 1931 alone the cost of these operations exceeded £50,000, a colossal sum in TransJordan's terms. The full cost in terms of lost production, losses in tax revenue and monies diverted from other funds was not calculated but it can be safely assumed that it only added to TransJordan's difficulties in this period.

Other pests and Plant Disease

Field mice were also a problem. The main swarms tended to afflict the more densely cultivated areas of Ajlun in the north where they were a threat to crops. Nevertheless, they were, it seems, efficiently dealt with. This was the case in 1930 when 70 per cent of one swarm were eliminated (Annual Report 1930:117). 100 kilos of poison eliminated another invasion near Irbid in 1933 (Situation Report March 31st 1933, FO 371 16926). However, there was a particularly bad attack in 1940, which affected up to 374,000 dunums of land (Quarterly Report January 1st-March 31st 1940, CO 831 55/7). Successful campaigns were also carried out against attacks in 1931 (Annual Report 1931:191), 1936 (Annual Report:398), and 1939 (Quarterly Report January 1st-March 31st 1939 CO 831 51/7).

Other pests which occasionally affected crops and vines were the 'Lejah' beetle, which attacked wheat crops in the Kerak area in 1928 (Situation Report April 1st-June 30th 1928, CO 831 1/2). Aphid insect attacks on crops in 1931 near Amman, Salt and Irbid, and damage to crops and vines by mole crickets were also reported, but these pests were successfully dealt with (Annual Report 1931:191).

iii. Inputs I: Seed Propagation Schemes, Agricultural Training, and Crops

Introduction

The agricultural cycle in TransJordan required a new supply of seeds on an annual basis. In good years, the harvest would provide a large proportion of the next season's seed, but in poor years this supply was seriously depleted. Schemes to control the propagation of seed in TransJordan were begun in the mid-1920s in order to develop strains more suited to the agricultural conditions of the country, and to cut the cost of imported seeds.

There was also concern among more experienced officials that farming methods in TransJordan needed to be changed. The Agricultural Experiment Station [AES] was a small model farm which was created to do two things: to produce seeds, either better quality seeds of existing crops, or to test new crops in local conditions; and to provide by example, training in field and crop rotation patterns, and the use of agricultural machinery. In this section, the schemes for the propagation of seed, the provision of agricultural training, and developments with crops will be examined.

Seed Propagation Schemes and Agricultural Training, 1926-1933

In 1926 a proposal was made to set up three AES (Annual Report 1926:72), and by 1929 nine AES were in operation. However, though called AES, in practice and scope they were no more than small nursery gardens which grew fruit, vegetables, and cereals, sometimes for free distribution. In 1932 they only totalled 45 dunums in area and had a total of 72 plots. In contrast, a full AES would have been expected to conduct the long term acclimatisation of various seeds, and have several plots to demonstrate suitable crop and field rotations to local farmers.

TransJordan's existing nurseries fell short of this. Nevertheless, they did a useful job. In 1929, for example, the nursery at el-Hummar, which concentrated on cereals, distributed 20,000 kilos of seed to the Bani Hamida, a tribe in the process of sedentarization. In 1930, farmers in the Tafila area received free seed corn, and nomads in Ma'an were given a similar gift in an attempt to encourage them to farm (Annual Report 1926:163; Annual Report 1930:218).

Attempts were made to diversify the activities in the AES to suit local farming needs. Trees were supplied by the AES at Jerash, Madeba, Irbid and Roseifa (which also grew apples, peaches, and plums). Others specialised in grains, fruit and vegetables. An experiment with potatoes was also begun when 'Renown' potatoes were imported from Scotland (Annual Report 1933:273-274).

Despite their limited size, the success of the AES encouraged the Government to plan for a more comprehensive system. One aspect of this was to create nurseries on plots attached to schools and by 1932, 31 such plots were attached to public sector schools, varying in size from two to eleven dunums. The nursery gardens grew 'fifteen varieties of wheat, ten varieties of barley, and thirteen varieties of leguminous crops' (Annual Report 1932:227-228).

A more organised approach to agricultural training also became evident in the early 1930s. In 1933 a scheme was begun to send a small number of teachers and pupils to agricultural schools in Palestine and Syria (see Chapter 9). Once trained, these teachers and pupils were attached to schools which had gardens (Annual Report 1933:265). The initial consequence of this training scheme was a more determined effort to use the plots in school gardens to demonstrate the benefits of crop and field rotation. However, the protracted drought meant that the actual success of many of these schemes was slow to emerge (Annual Report 1934:262).

The Seed Propagation Scheme, 1933-1938

The protracted drought meant that farmers often lacked a regular supply of seed for the succeeding year's crop. Thus, the Economic Committee were keen to see a major expansion of new seed propagation,and accordingly, an application was submitted to CDAC for a seed propagation scheme (Recommendations of the Economic Committee, Chapter III [1934], CO 831 34/8).

The aim of the CDF scheme was to boost the quantity of seed made available to farmers. Quality was also a factor because the Agriculture Department wanted seeds of high class strains re-cycled. The import of new varieties of seeds from abroad offered some scope for improvement but they needed testing for their suitability to conditions in TransJordan.

The CDF scheme was approved in 1935 for a three-year period, allowing for 120 tons of seed to be provided to farmers each year: 50 tons of wheat, 50 tons of barley, and 20 tons of various other seeds. This boost to the available supply of seed would, it was expected, lead to farmers returning one and half times the quantity they received thus leading to an increase in the quantity of seed available for each successive sowing ('Memorandum-Scheme no 374 Seed Propagation-TransJordan', enclosed with High Commissioner to Secretary of State, May 21st 1938, CO 831 47/5).

In the first year of the CDF scheme, 1935-1936, four types of seed were purchased and distributed: wheat, barley, kersennah, and jilbaneh. In the two subsequent years, lentils were added (see **Table 7]:**

Table 7: The Distribution and Recovery of Seeds, 1935-1938

Year:1935-1936

Seed	Purchased [kg]	Recovered [kg]	Distributed [kg]
Wheat	50,067	n/a	50,067
Barley	20,181	n/a	20,181
Kersennah	5,039	n/a	5.039
Jilbaneh	5,020	n/a	5,020
TOTAL	80,307		80,307

Year: 1936-1937

Wheat	94,212	3,950	98,179
Barley	11,866	-	11,866
Kersennah	10,000	250	10,257
Jilbaneh	10,000	432	10,682
Lentils	1,313	-	1,313
TOTAL	127,391	4,632	132,297

Year: 1937-1938

Wheat	50,000	137,619	187,718
Barley	5,000	16,192	21,192
Kersennah	-	13,607	13,682
Jilbaneh	-	14,256	14,256
Lentils	6,605	1,368	7,981
TOTAL	61,601	183,042	244,829

(Source: 'Memorandum-Scheme 374 Seed Propagation-TransJordan', High Commissioner to Colonial Secretary, May 21st 1938, CO 831 47/5)

The scheme fell short of its expectations. The implementation of the scheme was delayed and a proportion of barley and lentils was not distributed at all. In addition to these supply problems, the exceedingly poor rainfall for the year 1935-36 was also a serious blow to the scheme. Few farmers could gather the required quantity of seed for the next season's sowing, and many collected seed too poor in quality to be used.

By contrast, the harvests for the year 1936-37 were successful and could have been even better had the requisite amount of seed been available from the previous year. Another good harvest followed in the last year of the scheme, 1937-38. The official view of the scheme was that it had been a success:

> 'The Department of Agriculture has reported that the yield of the seed issued has been generally excellent when climatic conditions have been reasonably favourable for proper germination and growth; that prices realised by cultivators on their crops from the selected seed have been higher than on the ordinary local grain, and that the scheme has proved

popular and beneficial' (Memorandum-Scheme No 374, Seed Propagation-TransJordan' High Commissioner to Secretary of State, May 21st 1938, CO 831 47/5).

Nevertheless, the scheme could have been even more successful. The TransJordan Government actually underspent on their fund. Of the total £3,060 made available for the scheme over the three-year period, by 1938 £297.551 was left in the account, which CDAC allowed TransJordan to retain for further purchases. There had been two obstacles to the greater success of the scheme. One was administrative, and had resulted in delays to the start of the scheme; the other was the calamitous rainfall of 1935-36. This had simultaneously depleted crops in 1936, and the seed that could be gathered from them. In spite of this limited success in the 1930s, seed distribution schemes were revived in the 1940s, though documentation on their effect is lacking (Political Situation Report for October 1942, CO 831 58/3).

Developments in Crop Production

Agricultural training took a step forward in 1936 when a site for a large AES was purchased with CDF support. The 600 dunums site at Jubeiha on the outskirts of Amman was larger than all the other AES combined. The plan there was to provide plots for a variety of crops, with fruit-trees planted strategically to provide wind-breaks (Annual Report 1937:392; Goichon 1967:451).

Towards the end of the 1920s, a more commercial attitude to the planting of vines and fruit-trees was evident. In the small nurseries that were opened up in the Ajlun and Belqa districts a total of 33,500 olive trees were planted, and the Government had 250,000 fruit-trees available for planting (Annual Report 1927:80). In 1931 it was reported that 110,000 wild olive suckers had been planted, while the Government nurseries had a total of 375,000 trees available for planting (Annual Report 1931:191).

There was a clear demand from farmers in Ajlun and the Belqa for trees bearing a commercial crop, and this was evident from the considerable tree-planting activities of the private sector. In 1932 it was reported that '42,000 fruit trees and 27,000 forest and ornamental trees have been planted by private agency' (Annual Report 1932:227). Again, in 1933, private enterprise accounted for the planting of 19,614 wild olive trees, 78,545 fruit trees, and 10,000 ornamental trees (Administrative Report for the Quarter ending March 31st 1933, FO 371 16926). These figures compare favourably with those of the Government for 1932, when 6,100 grafted and 56,000 ungrafted fruit trees, and 70,000 forest trees were planted (Annual Report 1932:217).

Nevertheless, commercial considerations did not guarantee good crops. For example, in 1931 the olive harvest was 'above average', while other fruit trees lost heavily owing

to severe winds (Annual Report 1931:191). In 1933 the olive crop was a failure, but in some areas the grape harvest had been excellent and secured 'handsome profits by sales in Palestine' (Annual Report 1933:274). But it is clear that the search for a profitable crop had led many cultivators to change their land-use pattern from cereal production, and to plant trees instead.

This new enthusiasm for olives and vine-fruits also became part of the agenda of the Economic Committee in 1934. They recommended that any state land that was not under irrigation should be planted with carrub-trees whose fruit could be used for domestic fodder and for export. They wanted the existing nurseries expanded in order to experiment with sub-tropical fruits, such as dates (Recommendations of the Economic Committee, Chapter III [1934], CO 831 34/8).

In his response to the report of the Economic Committee, Cox agreed that there was scope to expand the work of the nurseries, but pointed out that experiments in this area were already under way. Date palms were being grown at Azraq and Baqoora, the nursery at Roseifa was testing apples, peaches and plums (Cox to High Commissioner, December 24th 1934, CO 831 34/8).

Notwithstanding the Committee's recommendations and Cox's response, no applications were made to CDAC for any funds relating to tree crops. This aspect of agriculture was allowed to follow its own course. It is conceivable that the energetic attitude of some cultivators in the private sector, coupled with the relative success of olives and vine-fruits compared to other crops, encouraged the Government to take a less interventionist stance than it was taking, for example, with seed propagation. That said, the cultivators faced two similar problems in the production of tree crops as they did with cereals. One was the unpredictability of the weather. The other was the increasing amount of land that was being designated as state forest land. In the early 1930s, when there was a high demand for land to grow olives and vines, this closing off of potentially profitable land by the state was not a popular policy.

ii. Inputs II: Agricultural Machinery

A variety of agricultural implements and machinery were in use in TransJordan during the Mandate period. Although details are lacking, it is known that farm machinery, purchased mainly by individuals, was imported into TransJordan in the period before the First World War. Steam mills manufactured in Britain, Switzerland and the USA were imported in 1908, while water mills were imported from Britain and Germany in 1909 (Report on the Trade of Damascus for the Year 1908, by Mr Consul Devey, Accounts & Papers Vol XCVIII [1909}, no 4293, p5; Report on the Trade of Damascus for the Year 1911, by Mr Consul Devey, Vol C [1912-13], no 5016, p6).

In the 1920s there were more imports of water mills, and also of olive oil presses, while in the early 1930s, a diesel-fuelled corn mill was in use in the village of al-Qasr, north of Kerak (Konikoff 1946:61; Annual Report 1929:163; Lancaster & Lancaster 1991, np).

For the most part, cultivators relied on locally produced tools such as hand-made sickles, winnowing forks and sieves, and threshing boards. The 'ard, or nail plough was made by hand from wood. Indeed, the village of el-Mezar in the Ajlun district was noted for its exports of ploughs across the region (Report on the Ajlun District, December 31st 1920, FO 371 6371).

Although customs duties were exempt on imports of agricultural machinery, modernisation was a slow process. Some tractors were known to have been imported in the 1920s, and modern ploughs in the 1930s, but it was not until the 1940s that the pace of change accelerated. This came about as the availability of seasonal labour decreased, raising the costs of the scarce labour which remained. Thus, the changing attitude to modernisation was motivated by the farmers' need to reduce costs:

> 'In prewar days thousands of men and women came from Syria and Palestine to harvest in TransJordan once a year but the present day restrictions on travel have put an end to that practice and the high cost of labour on such a year as this is driving many landowners to invest in mechanical reapers and threshers' (Report for May 1938, by Acting British Resident Alec Kirkbride, CO 831 51/8).

Imports of modern ploughs and tractors also continued in the 1940s (AbuJaber 1989:284 n28). and were, moreover, encouraged by the Middle East Supply Centre [MESC]. In the early 1940s they commissioned a report into TransJordan's agriculture which suggested that tractorisation of agriculture in the Ajlun and Belqa districts would open up new land for cultivation and increase yields (Report of a Survey of Palestine and TransJordan, enclosed with O.S.Morgan [American University of Beirut] to F.Winant [MESC, Cairo], December 28th 1942, FO 922 98).

Imports of agricultural machinery were purchased by individuals. Although the Economic Committee in 1934 had recommended the purchase of cheap modern machinery, there is no evidence to suggest that the TransJordan Government ever applied for more credits for such purchases from the Treasury's Grant-in-Aid. What is of interest here is the extent to which private sector initiatives played the leading role in the modernisation of agricultural machinery. This was a further response to the transition from subsistence to capitalist agriculture that had been taking place since the late Ottoman period, and was further boosted in the Mandate period by land reform.

iv. Forestry and Soil Conservation

a. Forestry

Introduction

TransJordan's principal forested zones were in the high altitude areas of the Ajlun district in the north-west, and in the region between Shobek and Tafila south-east of the Dead Sea. These zones included relatively dense forest as well as more open woodland, with the denser oak woods more common in the wetter north; and the southern drier areas characterised by more open and lower growing woods of juniper and willow (Atkinson & Beaumont 1971:306). All of these areas should be distinguished from the orchards and olive groves that were commonly planted in the environs of towns and villages, particularly in the Belqa and Ajlun districts.

The Late Ottoman Period

TransJordan inherited from the Ottoman Empire a crisis in forestry. Even before the campaigns of the First World War, trees were felled for charcoal to serve markets in TransJordan and Damascus. Wood was also taken for the manufacture of tools, and to make way for cultivation (Raikes 1967:82). The War accelerated this process as Ottoman troops cut down trees to fuel locomotives on the Hejaz Railway [**6**]. In the north an aerial ropeway was constructed in the Yarmouk gorge to transport wood to the railway (Annual Report of the Department of Lands and Surveys, Forestry Section, by G.F.Walpole [1944], FO 922 229, hereafter referred to as 'Forestry Report' [1944]). In the south a branch line of the Hejaz railway was constructed from Uneiza to Shobek to extract wood from the forests in that area (Hamarneh 1985:70).

The Mandate Period

Legal Measures for Forestry Conservation

After the War, the pressure on fast dwindling woodland went unabated. The charcoal trade continued, while the felling of trees increased owing to a renewed expansion in the farming population after the end of conscription into the Ottoman Army ('Forestry Report' [1944], FO 922/229). This deteriorating situation continued until a Woods and Forest Ordinance was decreed in 1925. This made the unauthorised felling of trees a criminal offence. Eight forest guards were hired to enforce the decree (Annual Report 1925:62). A more formal Woods and Forests Law was passed in 1927. This marked the beginning of an attempt to establish a new regime for the conservation of existing forest by registering it as state forest land. As a part of this Law, 22,000 dunums of state forest land were immediately demarcated, while an expansion of such land continued throughout the Mandate period.

However, the drought undermined the successful implementation of the law, as cultivators cut trees to sell as fuel to compensate for their loss of income from crops. In April 1933, Cox saw the need for money to provide secure fencing in designated areas for forest conservation because the 1927 Law had failed in its primary purpose to prevent tree felling (Cox to High Commissioner, April 7th 1933, CO 831 24/6).

In fact, no applications to CDAC were made for financial assistance in forestry conservation. Indeed, the Annual Report for 1934 claimed that the 1927 Law was working to prevent the unlawful felling of trees, 'except by ignorant ploughmen' (Annual Report 1934:263).

Poor rainfall led to a rise in offences against the Woods and Forests Law. Offences totalled 389 in 1935, 436 in 1936, a very poor rainfall year, rising to 921 in 1938, and reaching an average of 1,000 by the date of the report. This illegal cutting of trees, combined with the uncontrolled grazing of livestock had 'left most of the trees in a very ragged state' ('Forestry Report' [1944], FO 922/229).

State Forest Land

By 1938, all the forests under state control amounted to approximately 113,000 dunums (Annual Report 1938:320). In addition, there were two new nurseries, one at Wadi Zaher west of Irbid where seedlings for forest trees were grown, and one at Surra near Mafraq (Kasapligil 1956:5).

Although the Government used the Woods and Forests Law in order to engage in forest conservation measures, their decisions about the location of state forest land were not without controversy. Indeed, the privatisation of land which began in 1933, tended to conflict with state forest rights. The measures taken to increase the amount of land in private hands encouraged cultivators to claim as much land as they could, either to clear it of trees for the purposes of cereal cultivation, or to plant vines or other fruit-bearing trees. However, in the case of the village of Debbin in Jebel Ajlun, the demarcation of state forest land deprived it of 40% of its land area, including a range of grazing land for livestock, an essential part of the village economy (Johnson 1954:4).

To some extent the Government appeared to compromise on access to state forest land. They agreed to register as state forest land only the most extensive forest ranges, leaving other areas available to be cleared for cultivation. It appears that these were mostly areas of open woodland or scrub rather than forest (Annual Report 1933:275-276).

It is unlikely that even with such a compromise the new landowners would have been contented. Their demand was for land that could be turned to profit. Moreover, they

UNIVERSITY OF DURHAM LIBRARY

would have been aware that in some cases, for example, with regard to the charcoal trade, the Government was in fact allowing controlled access to state forest land.

These practices pre-dated the 1927 Law and were a consequence of the drought that had already begun to affect agricultural production. The charcoal trade was seen as a commercial necessity. Apart from those traders who made a living from it, the collection and sale of wood was either a supplementary source of income of modest but not inconsiderable importance to farmers in a poor harvest year, or an alternative source of fuel to animal dung. Thus, control of the market was seen as a better option than outlawing it, though the export of charcoal was banned in 1925. From 1925 to at least 1938 licensed charcoal contractors were allowed to collect dead wood and fallen timber and, under supervision, prune in state forest land. In particular, one area whose location is not given in the records, forest which had been devastated by fire in 1926 became a designated zone for contractors who could sell charcoal and firewood in the towns ('Forestry Report' [1944] FO 922 229). Villagers were allowed only to collect dead wood and fallen timber in their own neighbourhoods. One exception to this rule were the Bani Hassan, who were given a special licence to sell locally collected firewood in Amman and other towns (Quarterly Report ending September 1933, FO 371 16927). However, even this charcoal trade was banned in 1938.

Forestry Management

The initial purpose in the creation of state forest land had been to conserve existing forest ranges. In later years these forest ranges were used to experiment with new trees and to regenerate the soil cover. But the length of time taken for forestry experiments to mature meant that results were often not available until after 1946.

In 1942 the Lands and Surveys Department completed a comprehensive survey of TransJordan's forests to find out out if they could have any commercial uses apart from yielding timber crops. The report concluded that although the forests contained various tree species that were useful as sawbench timber, the inadequate rainfall and the low level of forest management meant that their quality was too poor to be commercially viable. It was recognized, however, that such trees were used in the manufacture of agricultural and other tools, and concern was expressed that even this limited use of forest timber was having a harmful effect.

This limited level of forest conservation, then, continued much as before, but any hope of improvement was dashed by the onset of war in 1939 which meant that sufficient funds for forestry were not made available. Walpole concluded his report with a bleak warning:

> 'In a country where the traditional policy is ruthless exploitation for immediate gain, where agricultural practice is a mining operation rather than following the precepts of good husbandry it can hardly be expected that the forests would be left to play their proper part in the agricultural economy unless adequate safeguards are provided for their preservation' ('Forestry Report' [1944] FO 922 229).

The need, as much as the desire by many to engage in profitable farming was too great to be contained by the law protecting forest land. Indeed, Walpole's own report suggested that the supervised pruning which was allowed was a mistaken policy. No pruning at all, certainly no grazing by livestock, should have been allowed if the forests were to be properly protected.

The greater urgency with which forestry conservation was viewed did mean that forest enclosures were more closely monitored after 1938, and in time were models of what could be achieved. Thus, a more optimistic view of what forest conservation measures could achieve was expressed by Waterer.

He cited the example of the forest enclosure at Ruman, near Jerash, on the southern escarpment of the Wadi Zarka, established in 1940, to demonstrate what could be done. Situated in the 'Zarka Gap', a drier area between the northern Belqa and the Ajlun district, the enclosure and re-establishment of forest cover had led to a significant stabilisation of the soil, where before gullying had been induced by excessive run-off. Moreover, the vegetation which had reappeared was suitable for grazing, on condition that this be strictly controlled on a rotational basis. (Waterer 1949:4).

In areas of lighter rainfall, such as Surra near Mafrak, and Khanasiri, where enclosures were established in 1937, the same benefits were noted and the main recommendation was for the selection of tree varieties better suited to the rainfall conditions, generally Acacia rather than Pistachia (Waterer 1949:9. See also Kasapligil 1956:5).

The difference between Waterer's optimistic view of the potential for forestry, and Walpole's more gloomy assessment was generated by the secular and human aspects of forestry policy. Waterer's optimism was based on the evidence of what the secular forces of nature could achieve under optimum conditions, Walpole's pessimism was based on the evidence that the human capacity to establish an optimum regime for trees in TransJordan could never be achieved. Here lies the central dilemma of forestry policy, for the tendency of shepherds to allow their flocks to graze in forested areas, and of villagers and others to 'collect' wood to a damaging extent in the same areas resulted as much from the depressed economic conditions of the country as from the profit motive. Indeed, in the distressed conditions of 1936 the lack of grazing in the

south led the Government to allow flocks to graze in the forested areas of Jebel Ajlun (Annual Report 1936:399).

Moreover, people had undoubtedly become used to the practice of forest grazing and wood collection. Even in a good rainfall year they would have continued to supplement their income to the detriment of forests. The fact that the Government not only allowed 'dead wood' collection in times of distress, but 'supervised pruning' defeated its own policy objectives for forest husbandry. 'Supervised pruning' so clearly became 'supervised deforestation'!

Furthermore, the greatest damage had already been done to TransJordan's forests before the Government attempted to establish a more conservative regime in the 1930s. When this new regime began to appear it was compared unfavourably with the commercial policy which had the advantage -weather permitting- of producing more rapid and tangible results, and of satisfying the native hunger for some immediate income. Thus, the more purely 'infrastructural' features of keeping some forestry for its conservational value was neglected until quite late in the Mandate period. It is remarkable that as late as 1949, Waterer suggested that a lot of good forest land was not beyond redemption.

b. Soil Conservation

Throughout the Mandate period, soil erosion was a serious threat to TransJordan's agricultural regime. The threat came from two sources. One was the combined effect of the climate on the soil, not least during the drought which dried out the soil and made it vulnerable to wind erosion. Rain induced erosion on slopes was also a threat during the torrential rainfall that areas of TransJordan experienced.

The other source of the problem was farming practice. Collective, or *Musha* tenure was not thought conducive to good soil husbandry. Rotating ownership meant that individual farmers had no incentive to practice conservationist methods, especially if this limited output. In addition to this, the progressive inheritance of land and the tendency for parcels to be formed as small strips of land, also weakened the soil. Where strip farming was practised on sloping land, the soil was vulnerable to erosion through run-off during the rainy season, and thus to severe gullying (Waterer 1949:26).

Early on in the Mandate period, the lack of modern crop rotation practices among cultivators was identified as a cause of erosion. Officials of the Department of Agriculture attempted to tackle the problem by visiting villages in the northern districts lecturing farmers on the merits of a 3-year rotation pattern. It was subsequently reported that 17 villages in the Irbid area had adopted a 3-year rotation pattern. In addition to this, school teachers were instructed in the merits of crop

rotation in order to introduce the practice onto the plots in school gardens that were used for demonstrating modern methods of cultivation(Annual Report 1932:227). By 1935, 39 villages in the north had changed from a 2-year to a 3-year rotation pattern. However, the drought exacerbated the problems of soil conservation. The decline in rainfall encouraged farmers to plough land that would normally lie fallow, in a desperate attempt to maximise what crops could be grown from the land.Thus it was not Musha tenure alone that was to blame for poor soil husbandry.

Furthermore, cultivators who had registered their land in the mid-to late 1930s considered themselves free to do as they wished, and in their enthusiasm to open up their land to cultivation, it was reported that they had ploughed away erosion banks. In those (unspecified) areas where this had taken place, the 'havoc' of soil erosion was evident (Annual Report 1937:309).

Also, notwithstanding the Woods and Forests Law of 1927, uncontrolled grazing by livestock was having a deleterious effect upon soils under woodland. The heavy trampling of soil by livestock created earth-clods which did not absorb water and led to high rates of run-off during the rainy season (Kasapligil 1956:71).

Waterer (1949:27) identified poor road construction as another source of soil erosion. This, he argued, came about as roads did not have adequate drainage and banking, allowing water to run off the road surface and to cause severe gullying on adjacent land.

In his report on the hydrographic survey of 1938, Ionides recommended that greater use be made of terracing on rain-fed slopes, and a greater use of irrigation as contributions to a more stable soil regime (Ionides 1938:220-221). There is little evidence that these recommendations were acted upon.

Apart from the vagaries of the weather, and ages-old customs among the cultivators, one other problem proved to be an obstacle in tackling soil erosion. In the Mandate period, soil science was still a young discipline, so the level of technical knowledge that could be used to analyse the types of soil that could be found in their TransJordan context, was extremely limited.

Ionides (1939:211-220) saw soil erosion in the context of a particular climate region, with a need to understand the interplay of various forces, such as the rhythmn of the rainfall season, levels of siltation in rivers and streams and wells, farming practices, and so forth. His view was that while there was clear evidence that soil erosion had been taking place in TransJordan, caused by secular as well as human agencies, in many parts of the country such erosion was not irreversible.Hence his appeal for a

range of measures to be taken that would conserve the soil, and in the long term, where relevant, regenerate fertile soil cover.

A more exacting analysis of the soil regime in TransJordan was begun by a number of teams from the University of Durham in the early 1960s. Their reports are indicative of how far soil science had advanced by this time, and how much more detailed knowledge could be gained about soils within specific areas.

This suggests that only very primitive methods were ever used to try and control soil erosion in the Mandate period. These depended primarily on changing the behaviour of cultivators. However, the pressure to farm land, either for subsistence or for profit, was so great, and the drought years so severe, that adequate conservation measures of even a limited nature, were not effectively enforced outside specially designated areas.

v. The Management of Livestock Resources

Introduction

Animal husbandry was an important feature of TransJordan's economy for both sedentary cultivators and the nomadic and semi-nomadic tribes. For both communities, sheep and goats were great assets as they provided milk, cheese, meat, oil and wool, and could be reproduced quite rapidly over a two-year period. For the sedentary cultivators, oxen, donkeys and mules were used as farm and pack animals, while amongst the tribes, camels, and to a lesser extent, horses, were economic assets as well as the primary means of transport in the desert areas.

Events in the Mandate period upset the pattern of animal husbandry in four ways. First, the cycle of poor rains severely depleted herds, particularly in the southern areas. Second, the decline of the camel market in Cairo, and competition from the Sudan for what remained of it reduced the value of camels, at least until the end of the 1930s. As a consequence, animals were sold for lower prices, or died, or in some cases were rustled by tribes penetrating TransJordan from the Wadi Sirhan. It was the loss of this economic base which forced many nomads to seek a more secure existence in the cultivated zone. Third, the spread of motorised transport further reduced the domestic demand for camels, except at harvest-time (Glubb 1938:450). The fourth factor was the expansion of land being used for cultivation. This progressively reduced the availability of grazing land on the east bank plateau.

The Impact of the Drought on Animal Husbandry

The years of drought made serious inroads into the economy of the tribes. This, combined with modernised forms of transport, made it all the more difficult for them to maintain a desert-based existence. There was a recovery in the herds towards the

end of the 1930s, but it is also clear that by this time and into the 1940s, nomadic pastoralists were more likely to rear sheep and goats than camels, further evidence of their growing dependence on TransJordan's markets.

The Annual Reports did not begin reporting on serious problems with livestock until 1926 when cattle plague resulted in the loss of 313 head of cattle (Annual Report 1926:72-73). The early reports suggest that diseases among animals were common. But it was the drought which, directly or indirectly, took its toll on the country's livestock. .

The drought claimed large stocks in 1933, 1934, and again in 1935 when serious losses occurred in the south and when two-thirds of crops there failed (Annual Report 1933:274; Annual Report 1935:279). Cox reported in 1934 that in the northern districts, plough animals had been reduced from 560 pairs to 70 pairs because of the drought (Cox to High Commissioner, June 17th 1934, CO 831 27/8).

In 1936 the south was hit again and herders were given special permission to move stock north and graze in the forested areas of Jebel Ajlun. Other herders took their flocks to the Jordan Valley, but here they fell victim to diseases (Annual Report 1936:399). It was not until 1937 that there was some improvement in the situation. Flocks were herded to the east where there had been better rainfall than in some of the southern village areas, and there was a small revival in the Egyptian market (Annual Report:1937:392-393). 1938 experienced a further improvement (Annual Report 1938:405).

The annual reports suggest that although the decline had bottomed out in 1937, the drought had taken its toll of the livestock economy. Norman Lewis, for example, tabulates the losses among the camel population in the 1930s and the impact that this had on the social life of the Bani Sakhr: 'In 1932 many Sakhr had so few camels left that they could not move their tents and formerly wealthy people were reduced to penury' (Lewis 1987:134).

The Recommendations of the Economic Committee

The Economic Committee in 1934 were keen to see a revitalization of the country's livestock, and made a number of recommendations. They suggested that foreign breeds of oxen, donkeys and goats should be imported to cross-breed and improve the quality of stock, and that new stocks be allocated on a village basis. They also wanted to see a cattle farm set up in the 'Shera' region south of Kerak and the Dead Sea. They proposed an expenditure of £1,000 in this area for a stock development based on 600 head of cattle (Recommendations of the Economic Committee, Chapter III [1934], CO 831 34/8).

In his response, Cox offered only cautious support, suggesting that animal husbandry in the Shera should be confined to areas with known water supplies. He suggested Naqb Shtar, Wadi Musa, Tafila, and Qalat Aneiza as suitable areas (Cox to High Commissioner, December 12th 1934, CO 831 34/8).

In his 1935 Report, F.A.Stockdale also accepted that there was scope for an improvement in stock farming but saw little value in setting up a cattle farm, as proposed by the Economic Committee, and suggested that the short-staffed Department of Agriculture would be better used in the AES being established at that time (Report on a Visit to Palestine and TransJordan by Mr F.A.Stockdale, July 29th 1935, CO 732 72/3).

The Mandate period did see a small start to poultry farming, though the Reports are confusing here. In 1934, it was reported that there were poultry runs in 3 of the school gardens. By 1935 there were six poultry houses with fowl, turkey, geese and duck (Annual Report 1934:262; Annual Report 1935:251). However, in 1937 it was reported that poultry houses -perhaps referring to larger-scale operations- 'have not yet been started' (Annual Report 1937:352).

As with so many other areas of the agricultural sector, there was no coordinated policy to deal with livestock problems during the Mandate period. The recommendations of the Economic Committee, which did not amount to very much, were not acted upon due to lack of funding, shortage of staff in the Agriculture Department, and priorities elsewhere. It is also likely that the recovery in the livestock population which began in the late 1930s, encouraged the Government not to intervene, but to let nature take its course. Nevertheless, the impact of the drought and of the continuing trend towards sedentary agriculture had a profound effect on the economy of the nomads in this period. The most salient feature of it was the reduced emphasis on camel-breeding, which after all, literally defined the Bedouin way of life. The new emphasis on sheep and goat rearing only underlined the extent to which the loss of their independence forced the nomads to rely on TransJordan's markets for their survival.

vi. Agricultural Loans and Credit

Introduction

A comprehensive account of the operations of the formal and informal systems of credit that existed in TransJordan during the Mandate period is difficult to provide. There is only a limited amount of information available for the formal sector, and even less for the informal sector. Nevertheless, credit and loans were an important part of the agricultural sector. The formal sector was represented by the Agricultural Bank,

the informal sector by a body of merchants and moneylenders. These sectors will be examined in turn.

a. The Formal Sector

Credit was available for cultivators from official channels in the late Ottoman period. The Ottoman Agricultural Bank was established in August 1898 in order to provide 'credit facilities to cultivators of limited means at reasonable rates of interest' (Annual Report 1935:338). The creation of the Bank was a reflection of the extent to which the sedentary agriculture community had expanded, and of the cultivators' need for credit. Initially, the Bank was entitled to receive an 8% share of the tithes collected annually from agriculture to fund its operations. In 1907 this rate was reduced to 4%. Before the First World War the Bank had accumulated assets of £T10 million.

After the First World War the Ottoman Agricultural Bank continued to operate, re-named simply as the Agricultural Bank. In 1924 the TransJordan Government decided that the Bank's annual share of tax revenues from agriculture would be a fixed cash sum of £3,500. This was a higher sum than would have been realised had the 4% rate levied before the War been retained. Nevertheless, in June 1925, the Government passed a law reinstating the original rate of 8% as the Bank's share of agricultural taxes.

This law turned out to be of symbolic importance only. Any hope that the assets of the Agricultural Bank would increase on an incremental basis because of the new rate, were dashed by the impact of the drought on revenue from agriculture. This meant that the fixed payment of £3,500 was not only the Bank's sole source of revenue, the sum often exceeded what would have been available at the rate fixed by the law. As the High Commissioner put it, the Agricultural Bank's 'meagre capital and income do not place it in a position by which it could obtain the desired object', that is, of raising 8% of the collections from agricultural taxes to pass on to cultivators as loans (High Commissioner to Secretary of State, January 16th 1932, CO 831 19/2; Annual Report 1935:338).

The Agricultural Bank and H.M.Treasury

An example of the financial squeeze the Agricultural Bank experienced in this difficult period surfaced in 1931-32, when the TransJordan Government sought permission from H.M.Treasury to lend £P6,000 to the Agricultural Bank in order to increase its capital and thereby offer more help to cultivators (High Commissioner to Secretary of State, November 25th 1931, CO 831 16/10).

The Ottoman Bank had already in 1928 loaned £P4,000 to the Agricultural Bank to allow it to help farmers affected by the 1927 earthquake. Not only had this loan not been repaid, but the Treasury did not know the terms under which the Ottoman Bank offered the loan, nor was it clear what the rates of interest would be, or the pattern of repayment (Treasury to High Commissioner, December 1st 1931, CO 831 16/10).

The Treasury's initial response to the Agricultural Bank's request for the £P6,000 loan was shaped more by financial considerations than by the needs of TransJordan's cultivators. The debate in the Colonial Office varied, from the view of O.G.R.Williams that there were political as well as economic advantages to be gained from helping TransJordan's farmers, to Cosmo Parkinson's gut reaction to say yes, but in the end to agree with the Treasury's cautious response, (Minute by Williams, November 28th 1931; Minute by Parkinson, November 30th 1931; CO 831 16/10).

The Treasury complaint was that the terms for the disbursement of the £P6,000 loan were too vague. They complained 'we still find the position of this bank very obscure'. However, with the long term in view, they sanctioned the £6,000 loan. Not agreeing to it would mean that there would be distress in the country and either a loss of revenue through tax remittances, or the Government having to spend money on relief measures -or both (Trickett [Treasury] to Downie [Colonial Office] December 19th 1931, CO 831 16/10).

With insufficient revenue from taxes, the operation of the Bank was undoubtedly hampered by the succession of poor harvests as much as by the fiscal conservatism of officials in the Treasury in London, and in Amman. But the poverty of most farmers as a result of poor harvests was severe enough to place restraints on whatever lending which did take place, as in 1932 when 'the Agricultural Bank made what loans were possible to people who could offer reasonable security' (Annual Report 1932:204).

The Loan to Mithqal Pasha ibn Fayiz

Indeed, without reasonable security, the Agricultural Bank could only advance very small sums of credit, so that farmers had to turn to alternative sources of credit, and not always from the informal sector. In 1934, for example, the paramount Sheikh of the Bani Sakhr, Mithqal Pasha ibn Fayiz, sought funding directly from the British Government.

A loan of £1,000 was applied for on behalf of ibn Fayiz's when, as with many farmers and landowners in this year, he had 'latterly fallen into such financial straits as to be unable to cultivate his extensive lands'. In presenting his case, J.Hathorn-Hall (Chief Secretary to the Palestine Government), stressed two factors, that a) ibn Fayiz was an important man and that if his farming operations were successful it would be an

incentive to other bedouin to settle as farmers, and b) that the loan would be repaid a year after its issue and supervised by a professional from the Department of Agriculture (Hathorn-Hall to Secretary of State, October 20th 1934, CO 831 27/2).

Ibn Fayiz was prepared to mortgage up to seven-eighths of his estate, 16,312 dunums. The revenue from this in the first year after the loan would be £3,000 gross, £1,050 net, so that the Government would get the money back (High Commissioner to Secretary of State, November 2nd 1934, CO 831 27/2). When the Ottoman Bank also provided guarantees, the British Government agreed to lend the money.

That ibn Fayiz got the loan was helped by the support of the High Commissioner who saw that the insolvency of such a large landowner would mean a considerable loss of tax revenue, and that ibn Fayiz' social status was sufficient for him to 'obstruct land reform' (High Commissioner to Secretary of State, November 2nd 1934, CO 831 27/2).

The Economic Committee and Agricultural Credit

In their recommendations on agricultural credit in 1934, the Economic Committee had been critical of the existing loan arrangements to farmers. Loans were too small, and the system of agricultural credit provided farmers with insufficient time to repay loans, so that they did not provide cultivators with the means to improve output and revenue. The Committee recommended

> 'that cultivators should be granted long term loans; a portion of such loans should be allotted for building houses, the purchase of animals, special seeds, and implements the use of which has been proved in the country, particularly at experimental stations'. (Recommendations of the Economic Committee Chapter III 1934] CO 831 34/2).

The Committee also proposed that such loan arrangements should come under the jurisdiction of the proposed Department of Development and should have £50,000 to distribute at 9% interest ('Recommendations of the Economic Committee', Chapter III, [1934] CO 831 34/8).

Cox offered only tentative support for the scheme, and initially proposed that a special committee look at the new proposals more closely. In any event, the Department of Development which was to organise the scheme, was not created until 1937 (Minute by S.I.James, June 28th 1935, CO 831 33/9).

In sum, little progress was made in the agricultural loans system. In 1937 it was reported that a new Agricultural Bank Law was being drafted, and though no progress was made on it by 1938, the procedure for the application for loans was simplified (Annual Report 1937:308; Annual Report 1938:319). The limited lending statistics that

are available differ in the type of information they provide from year to year. **Table 8** suggests that there was a gradual increase in the assets of the Agricultural Bank between 1922 and 1939, but that the amounts of money that were loaned varied sharply. For example, loans in 1933-34 totalled four times as much as in the following year.

Table 8: Transactions of the Agricultural Bank, 1922-1939 (in £P)

Financial Year	Total Assets	Loans Issued	Loans Recovered
1922-1923 [1]	15,500	n/a	n/a
1928-29 [2]	40,000	5,594	7,799
1929-30	n/a	13,986	9,760
1933-34 [3]	n/a	33,468	124
1934-35 [4]	45,000	7,172	15
1935-36	60,000	15,729	27,967
1937-38 [5]	69,000	n/a	n/a
1939 [6]	66,287	8,535	14,543

(**Sources**; **1**:Annual Report 1938:320; **2**:Minute by O.G.R.Williams, December 10th 1931, CO 831 16/10; **3**:Annual Report 1935:339; **4**:Application to CDAC for the Department of Development, British Resident to High Commissioner, March 3rd 1935, CO 831 33/9; **5**: Annual Report:320; **6**:Quarterly Reports for January-March, April-June 1939, CO 831 51/7).

Any evaluation of the Agricultural Bank must set its aims within the overall environment in which it operated. Its aim to give financial help to cultivators in the form of credit, with which various inputs could be purchased, was as sound a policy in the Mandate period as it had been at the outset of the Bank's existence in 1898. This assumed, however, that the annual agricultural cycle would be completed reasonably efficiently and that farm yields would be sufficient to enable the farmer to pay back loans over a period of time.

In fact, the succession of poor harvests during the Mandate period not only reduced the ability of the farmers to pay back their loans. It meant that many applications to the Bank were not for loans to make improvements to an existing farm regime, but loans in the form of compensation for crops that had failed. That is, loans to meet an emergency rather than for development were the most frequent call on the Bank (Johnson 1954:6; Robins 1988:279). On top of this, by becoming impoverished through crop failure, the farmer's ability to offer security against a loan was diminished and it thus became harder for the Bank to secure its loans at all. Many therefore defaulted.

But it was also the case that Government practice discouraged the full use of the Bank as a means of agricultural development. Up until 1933, government policy had been to confiscate the property of debtors who defaulted on their loans. The Government

admitted that this policy was harsh and unpopular so that after 1933 the attitude to defaulters became more sympathetic. But the damage had already been done and fewer farmers were prepared to risk what they had in order to get a loan. Thus, whereas **Table 9** shows that in 1932 more property was seized than in 1933 and 1934, it was also clear that the Bank made fewer loans in those years. Indeed, the Bank itself had become remote and inaccessible to its potential clients. By 1935 only the branch in Amman remained open (Annual Report 1935:340; Robins 1988:280).

Table 9:Actions Taken by the Agricultural Bank Toward Debtors

Year	1932	1933	1934	TOTAL
Transactions	544	426	315	1285
Transactions Terminated Without Legal Proceedings	330	266	248	844
Transactions Passed to Legal Office	108	70	36	214
Transactions In Which Seizure and Transfer of Property Was Carried Out	19	1	-	20
Transactions Outstanding in Execution	87	89	31	207

(Source: Annual Report 1935:339)

b. The Informal Sector

A combination of factors in the late Ottoman period created a large informal credit system which persisted into the Mandate period, but there is little information on the scale of lending in this sector. In the late Ottoman period, the pacification of the countryside and the effective incorporation of TransJordan into the Ottoman Imperial system, was followed by an expansion of agricultural output. As more people farmed more land there was an influx into the country of merchants. In many cases, merchants would also act as moneylenders, and it was often through this dual role that merchants began to acquire land from foreclosure. AbuJaber (1989:82), for example, records the case of 17,000 dunums of land at Teneib being acquired by a Jerusalem-based merchant through foreclosure on a debt. Another case was of 150 farmers losing their land at al-Mukhayba for a debt of 27,000 piasters to a moneylender from Acre who later sold the land to someone else. The land was not bought back by Jordanians until 1975.

Three forms of informal credit existed in the late Ottoman period. Of these, the 'Contracted Debt' survived into the Mandate period. Under this system, a contract was signed for a financial loan repayable over a long or short duration with interest, usually

at 30% (Hamarneh 1985: 88-89). References to indebtedness in official documents of the Mandate period are sparse and vague. For example, the Quarterly Report for April-June 1929, commenting on the relatively good harvests of 1928-29 stated that these would give 'the cultivators the prospect of removing some part of the heavy debts they have incurred during a sequence of bad crops' (Situation Report on TransJordan for the period April 1st-June 30th 1929, CO 831 5/9). One benefit of land registration was seen to be a reduction in indebtedness to informal creditors, as the Annual Report for 1935 (p288) stated:

> 'it is gratifying to note that the security of title and simplicity of registration which result from settlement are helping to lessen recourse to money lenders. The large number of short term mortgage transactions now carried out in settled villages during the ploughing season between the landowners themselves and with the Agricultural Bank is significant of the immediate benefit arising from settlement'.

The interesting point in this passage is the suggestion that farmers were more prone to use the informal sector if their land was not registered, presumably because the Agricultural Bank required proof of ownership as security against a loan. This in turn suggests that the informal sector was used by farmers who had unregistered land, probably in areas of the Belqa and Kerak. But consideration must also be given to those farmers who turned to moneylenders because the loans from the Agricultural Bank were too small to be of use, and difficult to obtain.

Conclusion

The Mandatory authorities were keen to transform what they saw as TransJordan's inefficient, unproductive and largely communal agricultural system, into an efficient, productive and profitable sector based on individual smallholdings. This would increase the ability of TransJordan to 'pay its own way' and thereby reduce the size of H.M. Treasury's Grant-in-Aid. The picture which the authorities presented in their Reports was of a system that was slowly, but successfully taking hold, whose progress was only disappointing because of a succession of poor harvests. If evidence had been available of widespread defaulting on debts, it would have appeared in the situation reports in some form, with lands being lost to moneylenders while its original owners toiled in their fields as tenants or sharecroppers.

Certainly, evidence of debt and misery is there, if not of widespread defaulting on loans. In their report of 1934, the Economic Committee were deeply concerned to improve the standard of living of the average farmer. They wanted to 'ameliorate his situation, lighten his depression and raise him up from the pit into which Fate has thrown him'. What the farmer needed was land, and relief from debt. The Committee

were keen to tackle the latter though they also remarked on the need to protect the rights of those merchants who did lend ('Recommendations of the Economic Committee' Chapter III [1934], CO 831 34/8).

The absence of hard data allows only speculation, but if the informal sector was no better than the formal sector in stimulating agricultural progress, this is because both were subject to the chronic failure of harvests. Yet the availability of a surplus in TransJordan was obviously the magnet for traders. It did not have to be a huge surplus and TransJordan was not a 'breadbasket' or regional granary. TransJordan did become self-sufficient in vegetable production, and in good years exported its surplus of cereals, olives and fruits. Furthermore, the promise of better times allowed merchants to keep faith in TransJordan when they might have shifted their interest elsewhere.

Clearly, however, the slender resources of TransJordan could not attract the volume of capital either from the Government or the informal sector that might have been able to compensate for poor years and reap the benefits of the good years. The consequence was, as suggested earlier, a system slowly changing from communal to individual land tenure but unable to become profitable owing to a negative combination of poor harvests and underinvestment.

CONCLUSION TO CHAPTER 6

The Mandate administration approached the agricultural sector as the engine of economic growth in TransJordan. The intention was to stimulate agricultural production so that TransJordan would be a self-supporting territory, and relieve the British of all or a significant part of its Grant-in-Aid. But agricultural policy was dominated by the belief that if certain mechanisms were provided, then the desired economic consequences would automatically follow. This political approach to agricultural policy identified land reform as the key to changing what were considered to be old-fashioned, inefficient, and thus unproductive methods of farming.

In this respect, the British Mandate administration approached agriculture from the same angle as its Ottoman predecessors, except that Britain had no claim over ownership of the land and was quite prepared to privatize it.

However, apart from land reform, there was no real agricultural policy formation until the early 1930s. Between 1924 and 1936, crop failures were more common than crop successes, and the resulting conditions of drought undermined the attempts being made with land reform to stimulate agricultural output. It was as a direct consequence of the succession of poor harvest years, and the spectre of political unrest which attended it, which resulted in the formation of the Economic Committee by the TransJordanians themselves, and a change of attitude on the part of the Mandate administration.

Up until this time, it had been difficult for officials like Cox to accept that there was a role for Government to play in the economy. Even when this new policy agenda was drawn up Cox was still determined to exercise the fiscal austerity which had become his most characteristic feature in office.

The travails of this 'interventionist' agenda reveal certain strengths and weaknesses to the approach to agricultural policy in this period. Many of the schemes were reasonably constructed, and sought to make useful adjustments to, or provide support for, essential features of the farming sector. The seed propagation scheme, and the attempt to overhaul the existing canal systems, and open up new water sources on marginal land, were badly needed, and relatively cheap to implement. One weakness of agricultural policy was the assumption every year that the season's rainfall would provide, yet it was the woefully inadequate rainfall which played havoc with the seed propagation scheme in the mid-1930s. The failure to implement Water Rights legislation was also an obstacle, but it was not impossible to negotiate local agreements, as happened at Ghor el Safi. In addition, across the range of agricultural activities, there was a demand for capital that could not be met from domestic revenue. The money supplied from the CDF had to be bargained for and form part of specific proposals. Lastly, the Administration did not have the technical expertise to formulate cheap and effective schemes to improve output. Those experienced officials who wrote reports on TransJordan were usually seconded from Palestine for the purpose, or, like Ionides, they did not stay in the country long enough to see their proposals through from start to finish.

It must be stated, however, that although agricultural schemes were poorly funded and imperfectly administered, the Mandate administration did recognise that its original expectations of the agricultural sector had been too optimistic. It recognized that injections of capital over a long-term period, and technical assistance in the details of improvements to resource management were needed.

What the administration could never do was transform, in a short period, the ages-old habits of farmers on the plateau or the desert-based tribes. In many respects, as in land reform and the expansion of land coming under cultivation, the Mandate period maintained the changes that had been taking place in the late Ottoman period. In other cases, there was the beginning of new regimes, as in forestry and soil conservation.

As a consequence, the economic infrastructure of TransJordan, so closely dependent upon agriculture in this period, experienced only a slow, fitful growth. Changes took place to farming practices, but as with developments in transport, of more benefit to importers of European and American manufactured goods. There was a net expansion

of the domestic market in TransJordan as more land came under cultivation and as more people lived a sedentary existence in the cultivable zone.

The real losers in the Mandate period were the desert-based tribes. At the outset of the Mandate period, a predominantly camel-based economy gave way to one that was based on the rearing of sheep and goats. An economy which had been liberally oriented to markets across the fertile crescent was severely contracted, and limited to TransJordan. These changes were forced upon the tribes by the drought, by the increase in the land under cultivation which simultaneously reduced the amount of grazing land, and by restrictions on mobility into areas now outside TransJordan's boundaries. In addition, the development of motor vehicles reduced the demand for camels, while more generally, developments in transport and communication laid the basis for a quite different structure to spatial relations between government and the governed, between town and country, and between the north and south of TransJordan. These developments will now be examined.

NOTES

1. The members of Economic Committee were: Ali Tabarra -Director of Agriculture (Syrian, Muslim); Baz Kawar -Postmaster General (seconded from the Government of Palestine, Christian); Nusseir Nusseir -Engineer in Public Works Department (Palestinian, Christian); Said el Mufti -Administrative Inspector, Member of the Executive Council (Circassian, Muslim); Qasim Hindawi -Member of the Executive Council (TransJordanian, Muslim) Source: see Hindawi to Cox, December 24th 1933, CO 831 34/8

2. Raouf AbuJaber (1989:256-261) supplies a set of tables giving the rainfall in Jerusalem and the main TransJordan towns from 1846/47-1974/75. Up until the year 1937/38, AbuJaber has calculated rainfall for TransJordan on the basis of a comparison between Jerusalem rainfall figures for the period up until 1937/38, and the official figures for TransJordan after that date. That is, AbuJaber's statistics reveal a trend, they are not accurate statistics until 1937/38. Indeed, by producing hypothetical figures from the Jerusalem statistics, AbuJaber has ignored those isolated official figures for the years before 1937/38 for towns except Amman, which indicate that actual rainfall was considerably different in the Mandate period (either higher or lower figures). Nor did AbuJaber use the figures for Amman's rainfall available in Ionides (1939).

3. See Lancaster & Lancaster (1991,np) for a reference to contemporary problems over the distribution of water, not so very different from the problems of the Mandate period. Kingston (1990:331) makes the interesting point that the privatization of land in the 1930s actually made it more difficult to draft a water law since landownership was considered to have endowed landowners with (new) inalienable rights that had not existed before, such as in water, which had always been shared.

4. In May 1926, TransJordan, together with Palestine, Iraq, Syria, and Turkey, was a joint signatory to the agreement which set up the International Bureau of Intelligence on Locusts. The aim of the Bureau was to identify the location of the breeding-grounds of various species of locust, and to give advance warning (whenever possible) to countries likely to be affected by invasions (Material on the Agreement and subsequent correspondence, in FO 371 13747).

5. For a detailed account of the anti-locust campaign in the Sinai peninsula in this period, see Jarvis 1936:219-225.

6. Willimott (et al 1964:60) states that Ottoman troops used explosives to fell larger trees; otherwise handsaws were used.

CHAPTER SEVEN

TRANSPORT AND COMMUNICATIONS

INTRODUCTION

This chapter will examine the extent to which the Mandate administration developed the transport and communications infrastructure in TransJordan. Such an infrastructure was essential if the TransJordan Government was to impose its authority over the whole of the territory under its control. As Mann (1986:136) observed: 'Without effective passing of messages, personnel and resources, there can be no power'. On the other hand, developments in transport and communications which were introduced for security purposes also had, potentially, or in actuality, commercial benefits.

This chapter will consider the extent to which the British built on what had been achieved in the late Ottoman period. It will begin with transport developments and look at roads and motor vehicles, railways, and military and civil aviation, before moving on to discuss developments in the communications sector.

1. TRANSPORT

The Late Ottoman Period

The modernization of TransJordan's transport sector began in the second half of the 19th century. The first innovation to make its impact was the reintroduction of wheeled transport. This took place in TransJordan after the arrival in Amman in 1878 of immigrants from the Caucasus. These Circassians used two-wheeled ox-carts, the first time that wheeled vehicles had been used in TransJordan since the end of the Trajan era, c98-117AD (Hacker 1960:10; Bulliet 1975:19; Lewis 1987:109) [**1**].

The second transport innovation of the late Ottoman period in TransJordan was the construction of the Hejaz Railway between 1903-1904. The operation of the railway gave an important boost to the trade of TransJordan's northern districts with Syria and Palestine. Furthermore, by carrying pilgrims on the 'Hajj' route across TransJordan, in addition to other civilian passengers, and Ottoman troops, it became for a period of two to three months a year, 'a town on the move' (Hamarneh 1985:68-70).

Motor vehicles did not make their first appearance until the First World War, when armoured vehicles were used by Ottoman and British forces. Aircraft, deployed by the German forces made their first appearance in TransJordan in 1915.

The slow growth of wheeled transport before the end of the First World War did not encourage the modernization of TransJordan's roads. A carriage-road was built in the

late 1870s-early 1880s which linked Damascus to the district of Ajlun (Rogan 1991:91) but it is not clear exactly what route was taken, nor is the quality of the road known [**2**].

Circassian immigrants also revived the use of various routes which had served the cultivated zone over many centuries. These roads connected the Circassian and Chechen villages in the Belqa and Ajlun districts, such as Amman, Sweileh, Wadi Sir, Na'ur, Jerash, Sukhne, Zarka, and Roseifa, in addition to the Turcoman village of Ruman. In 1917, Fathers Jaussen and Ravignac also observed the ox-carts of the Circassians on the road from Amman to Madeba, and from Madeba to Ziza ('Notes on the Country Beyond the Jordan' [1917], FO 882 14).

There were two roads running from north to south which linked southern Syria to the Hejaz through Irbid, Amman, and Ma'an. The oldest, which had been a paved road during the Roman occupation, was also the earliest of the pilgrimage routes. Called the *'Tariq al-Rasif'* ('the paved way'), it ran south-west from Amman through Madeba, across the Wadi Mojib to Kerak, and from there across the Wadi Hasa to Ma'an. The other north-south route, and the later pilgrimage route, was called the *'Tariq al-Bint'* ('the maiden's way'). This ran along the line of the desert edge on a route that would later be taken by the Hejaz Railway (Peake 1958:85).

There were several east-west routes linking TransJordan to Palestine. In the extreme north-west there was a route linking Irbid and Ajlun to Nazareth across the bridge at Mejamie. Further south the route from Salt to the bridge across the Jordan at Damieh provided a connection to Jerusalem, Nablus, and Beisan in Palestine. A ferry also operated across the river at this point (Annual Report 1933:278). In the south, there was a route from Kerak to Hebron via Ghor el-Mezraa on the Lisan peninsula, and thence across the Dead Sea by ferry. There was also a land route which passed from Kerak though Ghor el-Mezraa to Ghor el-Safi, around the southern end of the Dead Sea to Zoueira in Palestine, and thence to Hebron (Fathers Jaussen and Ravignac, 'Notes on the Country Beyond the Jordan' [1917], FO 882 14).

During the First World War, two new all-weather roads were built in TransJordan. One linked Amman to Salt and Jerusalem across the river Jordan at the Allenby Bridge. This road was built by the Ottoman armed forces but the heavy use of it by the military during the conflict meant that by 1920 it was in urgent need of repair (Report of the High Commissioner, October 31st 1920, FO 371 5289; Peake 1939:380).

The other all-weather road was built in 1917 from Aqaba through the Wadi Itm to Guweira, by a company of engineers attached to the Egyptian Expeditionary Forces, and Egyptian labourers. It was intended to be strategic road to connect the British and

Arab armies based at Aqaba to the north, and, via Mudawarra to the east, to the Hejaz and the Wadi Sirhan. The construction of this road had also brought the first motor vehicles into the country, Rolls-Royce tenders, and Talbots (Lawrence 1962:466-468). By 1921, this road had fallen into disrepair **[3]**.

The rest of TransJordan's road network in 1921 consisted either of rough earth tracks, mostly serving to connect villages in the cultivated zone, or they were the ancient caravan routes which criss-crossed the desert. Thus, at the end of the Ottoman period in TransJordan, the road network, especially for vehicle use, was limited, and much of it was in disrepair by 1921.

The pack animal remained the principal mode of transport for most people with the donkey, mule, ox and horse in common use in the northern districts, the camel in the southern districts and the desert. This meant that travel was a slow business. According to Fathers Jaussen and Ravignac ('Notes on the Country Beyond the Jordan' [1917], FO 882 14), the 19 km journey from Kerak to the Christian village of Smakia took four hours. On Thomas Cook's tour to Petra in 1907, travellers took the Hejaz Railway from Amman to Ma'an, and from there the journey (approximately 30 km) was a 9 hour ride by horse to Petra (Cook's Traveller's Gazette 1907:21).

The Mandate Period, 1921-1946

a) Roads

Categories of Road

During the Mandate period the principal tasks facing the Administration in developing the road system were: the upgrading of the existing road network so that it could take motor vehicles; the construction where necessary -and financially possible- of all-weather roads; and the maintainance of this whole system. Roads can be grouped into three categories. The all-weather road was fully metalled, with firm foundations and a layer of asphalt. It was capable of taking light and heavy motor vehicles in all weathers. Motor tracks were non-metalled roads, unsuitable for vehicles in wet weather, but superior to rough earth tracks. Motor tracks were upgraded from rough earth tracks through a process known as 'soling'. This involved clearing tracks of boulders, and laying a foundation of mixed earth and gravel, compressed to a level surface by a road-roller. Rough earth tracks were, as their name suggested, tracks that were worn into the land through habitual use. The majority of roads in TransJordan were rough earth tracks, and the official view was that these tracks were 'sufficient for the needs of the country' (Luke and Keith-Roach 1934:475).

Although a few new all-weather roads in TransJordan were built during the Mandate period, the greater part of the country's road building programme was in fact a continuous process of upgrading rough earth tracks, followed by their maintainance.

Road-Building Schemes, 1921-1924

A first transport priority for the British, once their Military Officers had been posted to TransJordan in August 1920, was to maintain the all-weather road from Amman through Salt to the Allenby Bridge across the River Jordan that the Turks had built during the War. This remained the most important road in TransJordan throughout the Mandate period because it was the strategic connection between Amman and Jerusalem. It was also of economic importance to merchants and traders on both sides of the Jordan.

Because relations between Jerusalem and Amman between 1921 and 1924 were not always good, the High Commissioner in Palestine, Sir Herbert Samuel, insisted that it was more than a convenience to keep the road open at all times. He hoped that, eventually, TransJordan would be integrated into the administration of Palestine, but feared that the aim of Syrian exiles in the TransJordan Government was to break that link (Wilson 1987:45-49).

Furthermore, the CBR, Philby, preferred to keep Jerusalem at a distance. He made sure the Amman-Allenby Bridge was maintained, but did little else to promote transport developments along that road or elsewhere. Villagers at Tafila in the south were so keen to see the CBR visit their area that they renovated the road from the railway station at Jurf el-Derawish but were disappointed when Philby rode into town on a horse (Report by CBR to the High Commissioner, November 1923, FO 371/8999). The slow pace of transport development before 1924 also hampered the efforts of the Reserve Force to pacify rebellious areas of TransJordan, and to combat raids into the country from the Wadi Sirhan in 1922 and 1924. For this reason, road developments were speeded up after 1924.

The Situation After 1924

The improvements after 1924 to TransJordan's roads not only helped to increase the central Government's access to most parts of TransJordan, but was also beneficial to merchants and cultivators. Furthermore, while during the worst years of the drought, road maintainance was an important source of income for the unemployed, throughout the period under review, roads were seen by the Government primarily as a strategic asset, with a secondary economic function. The roads linking TransJordan to Palestine served both functions but in other cases, road provision had more to do with security than trade.

For example, the initial survey in 1928 for the construction of the Iraq Petroleum Company's oil pipeline from Kirkuk to Haifa, envisaged the creation of a motor track alongside the pipeline from Azraq to Burqa. In fact the route had already been marked out as a ploughed furrow line in 1922 for the proposed Haifa-Baghdad Railway which was never built (see below). When it was decided to lay a motor track instead its purpose was entirely military, as a result of the Druze rebellion in Syria (1925-1927) and outstanding French claims to areas south of the Jebel Druze. The Azraq-Burqa road succeeded in deterring any incursions into TransJordan from Syria (Situation Report, April 1st-March 31st 1928, CO 831 1/2). Another road was also opened between Umm Jemal and Semme on the border with Syria, explicitly to deter French forces from occupying this area (British Resident to Acting High Commissioner, November 12th 1928, CO 831 1/1) [**4**].

The all-weather road built in 1928 between Amman and the Hejaz Railway station at Marka, three miles out of the town centre, was also built for security purposes because the military needed rapid access to the railway in emergencies, and also because the station was close by the RAF's main aerodrome in TransJordan (Annual Report 1928:111; Quarterly Report for January 1st-March 31st 1929, CO 831 5/9; High Commissioner to Colonial Secretary February 27th 1934, CO 831 27/8). While the road also benefited merchants and cultivators who used the Hejaz Railway to import and export goods, the Government limited access to it in order to maintain its security function (Seton 1931:636). It is also conceivable that the motor track from Salt to the railway station at Marka , by-passing Amman town was constructed for the same security function (Annual Report 1930:220).

The strategic priority of roads was again in evidence during the Second World War. At the end of 1940, a new all-weather road was opened from the Hussein bridge to Ma'ad. This was built explicitly as a 'war measure' (British Forces HQ [Jerusalem] to British Resident, November 19th 1940, FO 816/62).

In some cases a road was built for a security function but still had a beneficial economic consequence. For example, a new motor track was opened up from Salt to Rumeimim in 1929 to facilitate the anti-locust campaign, but was subsequently used by the villagers for trading purposes (Quarterly Report January 1st-March 31st 1929, CO 831 5/9).

The enthusiasm of many villagers for better transport connections was fully exploited by the Government's Department of Public Works. It normally employed small work-teams equipped with blasting-powder, stone-crushers and road-rollers, but because the upgrading of rough earth tracks to motor tracks was time consuming and labour-intensive, the Department often found that road connections could be completed more

cheaply by villagers working under supervision and using Department supplies (Annual Report 1929:166). In 1930 alone, 122km of road in the Ajlun district, and 13km in the Belqa district were built in this way (Annual Report 1930:220, Robins 1988:277). The same arrangement helped to complete the road between Madeba and Zarka Ma'in in 1933 (Quarterly Report ending March 1933, FO 371/16926); and the road between Ajlun and Deir Abu Said in 1939 (Quarterly Report ending September 1939, CO 831 51/7).

The economic success of the upgrading of roads that took place in the Mandate period was largely dependent on the merchants and cultivators having crops to sell. In 1928, one of the few years in the drought period when farmers gathered in decent crops, the improvements that had been made to roads were cited as the reason why farmers had been able to sell their produce in Palestine 'much earlier than usual'. The ability to transport perishable crops such as fruit quickly and easily was a great advantage (Situation Report August-September 1928, CO 831 1/2).

The Regional Distribution of Roads

The Ajlun and Belqa Districts

Maps **7** and **8** offer a profile of the development of the road network over a 20-year period. The most salient feature in this evolution is the growth of motor tracks. Although these roads were not passable in wet weather, for most of the year they were considered adequate.There is little doubt that the northern districts of Ajlun, and the Belqa, benefitted most from road works carried out in the Mandate period. This area had most of the all weather roads. This was not just because the dual security-economic function of roads in this district was more fully exploited. This area was also the economic heart of the country, with time-honoured links to Syria and Palestine and needed a better developed road network. That a greater length of roads under maintainance is shown for the Kerak and Ma'an districts results from the greater distances between settlements (and police posts) in these districts.

A sizeable proportion of the total mileage of the road network in the north was accounted for by the TransJordan section of the Haifa-Baghdad Road, built between 1938-1941. This served both for military and commercial purposes between the Mejamie bridge and Mafraq. However, once past Mafraq the longest section of the road at 263km towards Iraq ran through desert and was little used (see below).

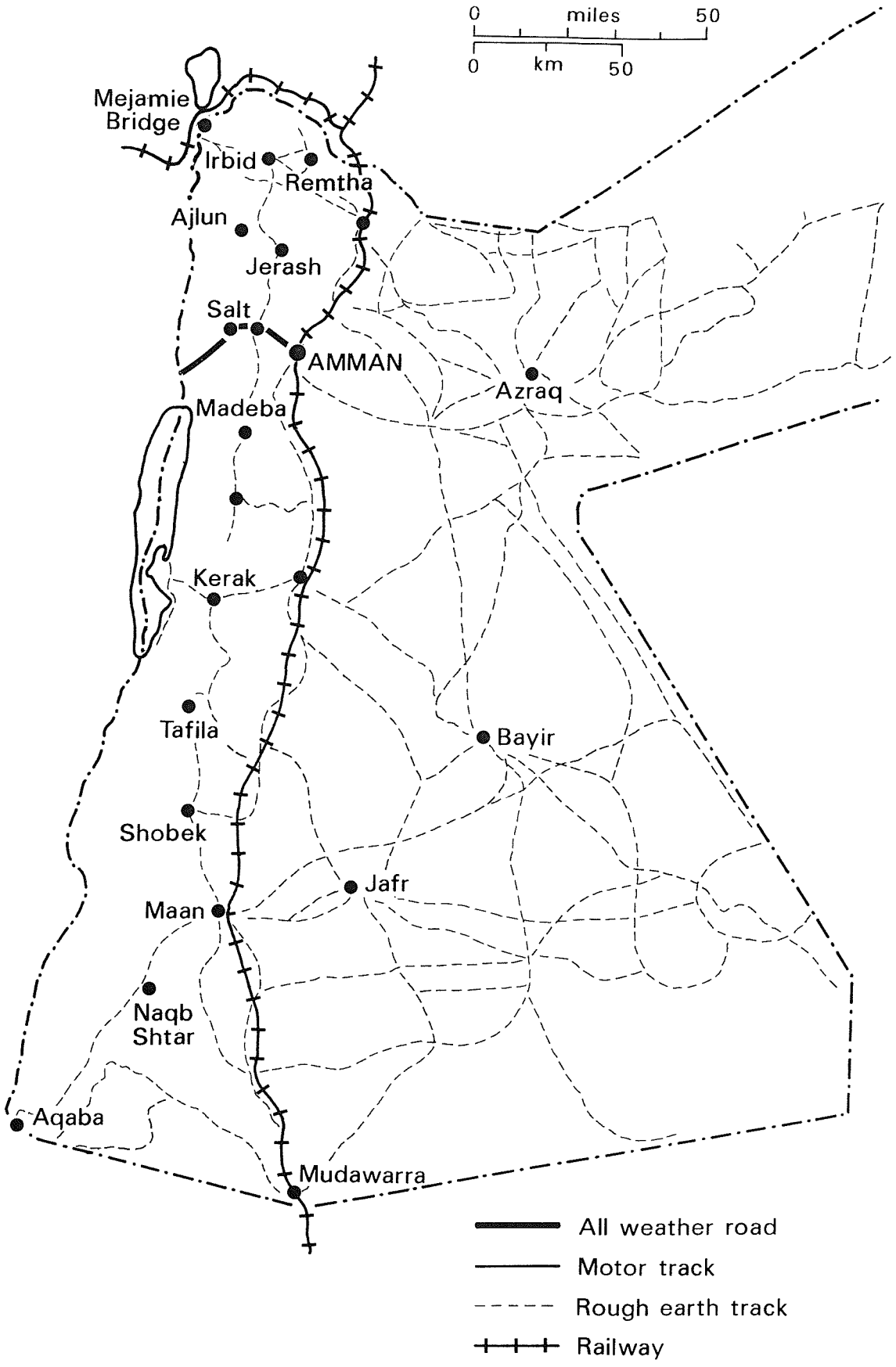
Other new roads were opened in the north in the Mandate period, but there is insufficient evidence to evaluate their economic importance against their military significance. Thus, a north-south road along the Jordan Valley was opened in 1933 to connect Karameh and the police posts at the Hussein bridge and the Mejamie bridge.

This was primarily a military road but had an economic function for farmers in the Jordan Valley trading with Palestine (Annual Report 1933:278-279). In the early 1940s, a direct route from Amman to Ajlun was opened up through Sweileh and the Jebel Ajlun area before reaching Ajlun. This was a more direct route than the one which passed from Amman through Jerash (Naval Intelligence Division 1943:519). Again, this road was opened for military purposes but economic benefits flowed to the villages that were linked up to it.

Roads in the Kerak and Ma'an Districts

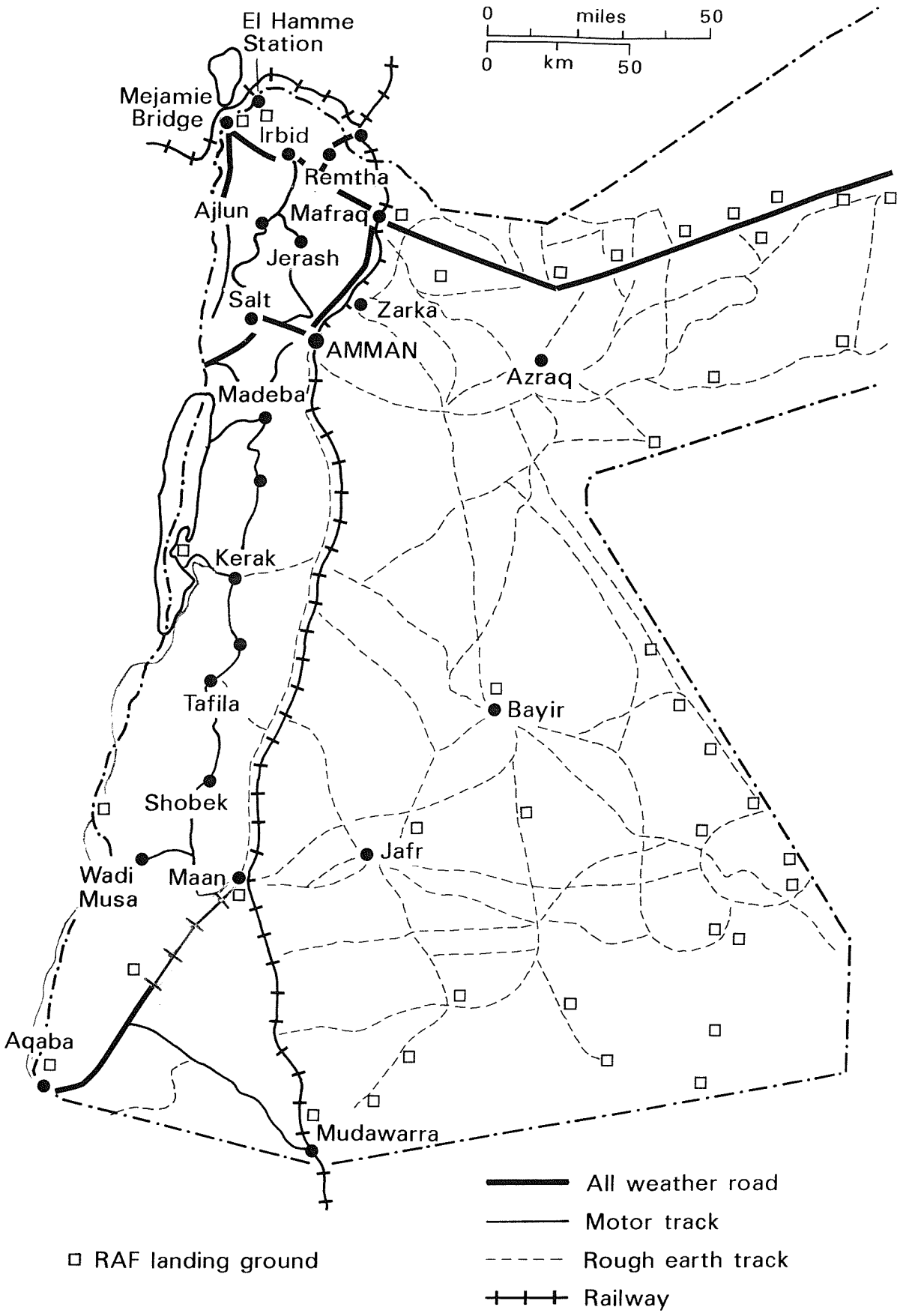
Mention was made earlier of the two pilgrimage routes which crossed TransJordan from north to south. At the outset of the Mandate period these two routes, across the Wadi Mojib in the west, along the desert fringe in the east, were merely rough earth tracks. Roads of similar category linked the villages in the area between Kerak and Ma'an, between Ma'an and Aqaba, and in the desert area east of the Hejaz railway.

Although a strong case can be made to emphasise the purely strategic function of roads in the south, north-south arterial routes were opened up during the Mandate with trade as well as security interests in mind.



Map 7 TransJordan: The Transport Network 1922

Source: modified from Naval Intelligence Division 1943



Map 8 TransJordan: The Transport Network 1942

Source: modified from Naval Intelligence Division 1943

An early example of a dual purpose route was the road in the south which linked Ma'an to Wadi Musa. When the construction of the road began in 1926, it was argued that it would facilitate the tourist trade at Petra, even though its primary purpose was to impose more authority in this remote area. The villagers at Wadi Musa feared that the road would in fact hurt their monopoly of the transport provision by pack animals from the village to Petra by allowing in motor vehicles. They were also aware that the new road would make it easier for the Government to collect taxes from the village. Attempts to ease the villagers anxieties failed, and a police post at Wadi an-Naqb was attacked in 1926 and four soldiers killed. This action resulted in the Government sending in troops to restore order and authority. The road was finally opened in 1930 and appeared to have no adverse effect on the tourism which the village economy partly depended on (Annual Report 1926:67; Toni & Mousa 1973:41) [**5**].

The old Roman road which ran from Amman through Madeba, across the Wadi Mojib to Kerak, and from there crossed the Wadi Hasa to Tafila and Ma'an was also improved to motor track standard to benefit trade. It was also expected that it would help the tourist trade at Petra because it was considered to be a superior and more scenic route to the other north-south road which ran further east along the line of the Hejaz Railway. Work on the road began in 1933 but was not completed until June 1939 when the Emir Abdullah opened the road across the Wadi Mojib. In practice, the impact of the road on trade was negligible (Annual Report 1933:278; Monthly Report for June 1939, CO 831 51/8; Naval Intelligence Division 1943:513).

Given the limited economic potential of the south, it did not fare badly for roads. This was largely because of the strategic sensitivity of the border areas with Saudi Arabia.

Britain had annexed the southern district of Ma'an in 1925, and although Ibn Saud agreed to recognise a status quo on the border question in the Treaty of Hadda 1927, both sides considered the issue to require a final conclusion at a later stage. In the meantime, Saudi-based tribes from the Wadi Sirhan and Jebel Tubeiq were a perpetual threat to the tribes and their livestock in TransJordan. Britain responded by maintaining patrols in the area for which a road network was needed.

Rough earth tracks led east of the railway at several points to the desert grazing areas. Some were upgraded later for use by motor vehicles. Motor tracks were opened up in the early-mid 1930s, between Aqaba and the police post at Rum, between Rum and Wadi Omran, and from Ma'an westwards towards the Wadi Araba via Sadaka and Delaga. Ma'an was also connected through Batn al-Ghul to Mudawarra on the border with the Hejaz. To the west, a motor track linked Aqaba to Kerak via the Wadi Araba, crossing into Palestine at Ain Hasb before re-entering TransJordan near Ghor el-Safi and climbing up to Kerak (Naval Intelligence Division 1943:518-519).

There had been a first class motor road built during the First World War between Aqaba and Guweira, but as pointed out above, this had fallen into disrepair by the onset of the Mandate in 1921. This road was reconstructed in 1942 as an all-weather road at a time when the pressures of the North African campaign led to the attempt to develop the port of Aqaba. The road ran from Aqaba to Naqb Shtar, where a branch line of the Hejaz Railway was built to Ma'an (Minister Resident [Kirkbride] to C.W.Baxter [FO], May 19th 1947, FO 816 107; Foot 1964:73-75).

International Road Links

When the Mandate began in 1921, TransJordan had road connections to Palestine and Syria. The only other major road connection to another country which was opened in the Mandate period was that to Iraq as part of the Haifa-Baghdad road built between 1938 and 1941. The TransJordan section of the Haifa-Baghdad was upgraded to the status of an all-weather road. The TransJordan section of this route had been surveyed in 1921 for a proposed railway and was also the route taken by the IPC oil pipeline from Kirkuk to Haifa. The route was determined principally by two factors: the extent of the lava belt to the south which would have presented engineering problems to the builders, and the boundary line with French Mandated Syria to the north.

This same route had already been marked out to help the RAF on its run from Cairo to Baghdad. Because the surveyor employed to find a route for the planned railway frequently lost his way, tractors were used to plough furrows in one-hundred yard sections. While there were short breaks between the furrows, they appeared to be continuous from the air and so helped RAF pilots. Landing grounds 15 to 30 miles apart were also marked and equipped with petrol tanks secured against inquisitive bedouin (Grant 1937:290). The ploughed furrow line in turn became the marker for the road from Amman to Baghdad which passed through Azraq and ended up at station H4 at Burqa.

The route taken by the road from Amman to Baghdad was closely paralleled on the Syrian side of the boundary by the road from Damascus to Baghdad. Because the road on the French side was in better condition, most traffic used it in preference to the road in TransJordan. More traffic shifted south into TransJordan during the Druze Rebellion (1925-1927), and demonstrated the value of the route, but because the road at this time was little better than a rough earth track the traffic returned to the Syrian route after 1927 (Annual Report 1925:60; Grant 1937:282-285).

Upgrading of the 340 km of the TransJordan section of the Haifa-Baghdad road to all-weather status began in August 1938 (Annual Report 1938:401; Konikoff 1946:76-77) [**Map 8**]. The more heavily used section of the road from the Mejamie bridge to

Mafraq via Irbid had already been upgraded in 1934 (Annual Report 1934:266). The whole road was completed in 1941.

b) Motor Vehicles

The enthusiasm of the villagers and traders in TransJordan for access to better roads was matched by their enthusiasm to use motor vehicles, so that the transition from pack animals to the use of mechanised transport took place quite rapidly.

The statistics reveal a steady increase in the number of vehicles in the private sector during the Mandate period (**Table 10**). As was pointed above, the first vehicles seen in TransJordan were used by Ottoman and British military forces during the First World War. At the outset of the Mandate period, most of Britain's military forces and their equipment had been withdrawn, leaving behind only two armoured cars. In his report to the Colonial Office, Hubert Young complained that these cars had neither tyres nor spare parts, and there were no experienced drivers in the country (Col.Hubert Young to Sir John Shuckbrugh, October 15th 1921, CO 733 7).

Table 10: The Growth of Private Sector Vehicles, 1921-1945

Year	Cars	Lorries	Buses	Total	Palestine	Syria
1921	2	-	-	2	-	-
1926 [1]	110	16	4	130	-	-
1933	232	231	32	495	6,126 [3]	-
1934	269	169	19	452	10,189	-
1935	274	169	34	477	12,000	-
1937	300	133	38	471	-	-
1938	335	230	24	589	-	10,620 [4]
1943 [2]	315	207	10	532	-	-
1944	289	240	15	544	-	-
1945	335	247	33	615	-	-

Note: Figures fluctuate depending on the roadworthiness of vehicles. During the War in TransJordan, many private sector vehicles were requisitioned for use by the Government in the war effort.

(**Sources: 1**: Konikoff 1946:77; **2**: MESC 'Statistics on Territorial Vehicles Fleets-TransJordan 1943-1945', FO 922 460; **3**: Palestine Économique [1936]; **4**: Naval Intelligence Division 1943a).

A comparison of the growth of motor vehicles in TransJordan with other countries suggests that in terms of numbers alone, growth was at first slow. For example, in the early part of the Mandate, Palestine had more vehicles, but it also had a larger and more economically diverse population. Nevertheless, growth picked up in the 1930s, so that Hershlag (1964:249) could point out that by 1938 TransJordan had a ratio of one vehicle per 500 inhabitants, the equivalent figure for Egypt and Iraq in that year.

It is not known which sectors of the population became vehicle owners, nor is much known about the marketing of, and the purchase of cars and trucks. Wealthy merchants aside, it is conceivable that villages pooled savings in order to buy vehicles on a syndicated basis. **Table 10** shows that trucks made up half of the vehicles in the private sector imported into TransJordan during the Mandate period.

What is clear is that vehicles made in the USA dominated the private sector to the exclusion of vehicles made in Britain or elsewhere in Europe. Shimizu (1986:190-191) has pointed out that the USA signed a convention with Britain to give it access to the economies of Palestine and TransJordan, an opportunity it exploited to the full. Models such as Buick, Ford, Chevrolet, Dodge, Chrysler, and Plymouth accounted for more than half of the cars and taxis included the inventory compiled by the Middle East Supply Centre in the mid-1940s (MESC 'Statistics of Territorial Vehicles Fleets-TransJordan 1943-45', FO 922/460).

It was argued by an ex-official of the Iraq Government that American vehicles were more common than others because they stood up better to the rugged conditions of the Middle East. Also, US firms had a superior back-up service in spare-parts than did British firms (Dobbs 1932:669) The same was true of TransJordan.

The state sector was made up largely by military vehicles. As was pointed out in Chapter 4 above, the Arab Legion's fleet of vehicles grew only slowly to reach 27 by 1937. The outbreak of the Second World War led to a significant increase so that by 1943-45 their fleet had grown to become the largest single group of vehicles in TransJordan, numbering 600 (MESC 'Statistics of Territorial Vehicles Fleets-TransJordan 1943-45', FO 922 460). The growth of this sector meant that by the 1940s, there were between 800 and 1,000 vehicles from the state and the private sectors using TransJordan's roads

In sum, there was a steady increase in the number of motor vehicles in TransJordan during the Mandate period, with the growth in military vehicles in the Second World War outstripping the private sector.

c) Railways

The Hejaz Railway

The only railway to cross TransJordan was the Hejaz Railway which ran from Damascus to Madina. Construction began in 1901 and had reached Madina by 1908. The TransJordan section was built as far as Ma'an between 1903-1904, and by 1906 had reached Mudawarra (Landau 1971:15).

There were two branch lines on this Railway. One ran from Deraa to the eastern Mediterranean at Haifa, whilst the other was a short spur line which ran from Uneiza to a point close to Shobek. This spur line was built during the First World War simply to exploit the wood of the Huh forest.The line fell into disrepair after 1918 (Naval Intelligence Division 1943:512).

There was a proposal in 1906 to build another branch line, from Ma'an to Aqaba. However, a conflict between Britain and the Ottoman Empire, over the stationing of Ottoman troops west of Aqaba led to an Ottoman withdrawal from the area (Vatikiotis 1985:221). No new extension to the Railway were made until 1942, when British forces constructed a new extension from Ma'an to Naqb Shtar. Here, it was to link up with an all-weather road being built as part of the development of Aqaba during the North African campaign (see above).

The Hejaz Railway was originally built, in part, as an act of Muslim piety, to facilitate the annual pilgrimage to Mecca, being financed entirely by subscriptions from Muslims. But it was also a useful strategic facility for the Ottoman Empire, whose armed forces could be more rapidly deployed in those areas south of Damascus where resistance to Ottoman rule was at its most recalcitrant.

It also brought economic benefit to TransJordan, permanently in the case of Amman and the northern districts, but only temporarily in the case of Ma'an in the south. For Amman and the northern districts it provided an efficient transport link to Damascus, the region's commercial and administrative centre, and also, via the branch line from Deraa, to the Mediterranean port at Haifa.

In addition, the railway made it easier for Ottoman garrisons to be resupplied at Irbid, Amman, Salt, Kerak and Ma'an. The increased security thus provided attracted an influx of merchants from Palestine and Syria. In the case of Amman the demographic character of the town was changed, and it ceased to be an exclusively Circassian community as merchants and others settled there (Lewis 1987:108; Hacker 1960:19-20).

With the arrival of the railway in the south the military presence in Ma'an was strengthened, government buildings and hotels were built, there was an influx of merchants from Palestine and Syria, and of tourists travelling to Petra. For a brief period, Ma'an expanded and was prosperous. However, once the railway moved further south, the volume of trade declined and Ma'an reverted to being no more than a small railway town (Ochsenwald 1980:136).

Other Railway Schemes

In the immediate aftermath of the First World War, a proposal was made at the Paris Peace Conference to revive a railway scheme dating back to 1856, to link the eastern Mediterranean to Iraq. In the Mandate period, British officials made at least two visits to the Wadi Zarka area in TransJordan, looking for feasible routes beginning from El Hamme station and continuing eastwards from there. No advance was made on the project at this time, possibly because of internal disruptions in TransJordan (Introductory Remarks by General Sir Osbert Mance, Keeling 1934:373).

Nothing came of this proposed railway scheme, for a variety of reasons. One of the incentives to build a Haifa-Baghdad railway across British-controlled territory was to pre-empt any similar scheme from being mounted by the French across Syria. After the internal difficulties of the 1920s in TransJordan, the scheme was looked at again. This time, however, it was a combination of engineering problems and the high cost of the project which meant that the scheme was never completed.

Apart from the high cost of the whole of the railway scheme from Haifa to Baghdad, there was also the fact that once the railway passed east of Mafraq it would be in uninhabited desert. There was also the case that ownership of motor vehicles by the 1930s was advancing at a faster rate and that road connections were establishing themselves across the Middle East at the expense of railways. The incentive to build railways in the Middle East was in decline from the 1930s onwards (Keeling 1934:385-386).

d) Aviation

TransJordan's earliest experience of aviation was provided by the aeroplanes of the German Air Force during the First World War. For the duration of the Mandate period, and with but one exception, aviation in TransJordan was wholly for military purposes, though landing grounds were made accessible to commercial aircraft flying over TransJordan's airspace.

Military aviation was important to TransJordan throughout the Mandate period even though it was comprised of only a small detachment of the RAF based at the Marka aerodrome near Amman. In Chapter Four attention was drawn to the large number of landing grounds that were established across TransJordan. The selection of these landing grounds was conducted following a request from the Air Council in 1929. The primary purpose of these landing grounds was to be for security, but the Air Council also suggested that commercial considerations should be considered by the TransJordan Government when choosing suitable locations (Colonial Secretary to High Commissioner, February 26th 1929, FO 816/90).

The only internal attempt to use aircraft in TransJordan for domestic commercial purposes took place in 1936 when a plan to exploit the fishing trade of Aqaba was put into effect. A second-hand Swedish 'Fokker' type craft was bought to transport fish to Amman, but the plane crash-landed on its first journey and the project was abandoned (Konikoff 1946:53).

The only other experience of commercial aviation in TransJordan during the Mandate period was in allowing aircraft crossing its airspace to use its landing grounds, either for refuelling, or emergency purposes. From 1921 onwards, the mail service from Cairo to Baghdad flew along the route that would be taken eventually by the IPC oil pipeline, and by the road from Haifa to Baghdad. This service was taken over from the RAF by Imperial Airways in 1929, while the Dutch airline, KLM, began operating the same route out of Cairo in 1931. While TransJordan's landing grounds were available for use by these commercial airlines (Grant 1937:290-291), there is no record of any use being made for emergencies or for refuelling.

2. TELECOMMUNICATIONS

Introduction

This section will examine the extent to which the Mandate administration developed the telecommuications sector. The combination of developments in the transport sector with innovations in telecommunications was an important factor in creating an 'infrastructure of power' in TransJordan. As with certain aspects of the transport sector, so in the telecommunications sector, services were developed primarily for the use of state institutions, such as the Government, and the armed forces. There was commercial potential for telecommunications, but as will be explained below, this was not fully exploited in the Mandate period.

i. Domestic Provision

The telecommunications network in TransJordan in the late Ottoman period was developed to only a limited degree, and by 1921 was in a state of collapse. The first telegraph links with TransJordan were made from Damascus in the late 19th century. By 1900 Damascus was connected to Salt. Before the construction of the Hejaz Railway connections further south had to be routed through Egypt and were expensive to operate. However, the extension of telegraphic connections from Damascus to Madina was provided along with the construction of the Hejaz Railway in the early part of the 20th century, and this also linked TransJordan towns on the railway, in addition to Salt, to Damascus. However, the service itself was unreliable, the telegraph

between Salt and Damascus being open only about five to six times a month (Rogan 1991:166).

Even this unpredictable service had collapsed by the end of the First World War, partly as a result of the guerilla attacks on the Railway during the Arab Revolt, and partly because the wooden telegraph poles which followed the course of the Hejaz Railway were torn down for use as firewood (Peake 1939:380) [**6**].

Shortly after the British Military officers were sent into TransJordan in August 1920, Samuel filed a report which stated that telegraph connections in the country were in the process of being reconnected. The line was already open from Salt to the Allenby Bridge, and the line from Amman to Ziza was being repaired (Report by the High Commissioner to the Foreign Secretary, October 31st 1920, FO 371/5289). The telegraph links along the course of the Hejaz Railway were repaired simultaneously with repairs to the track. However, areas like Kerak, which were not close to the railway, remained isolated without telegraph connections at all (Kirkbride 1956:20).

The situation began to improve after the Cairo Conference of March 1921 which clarified TransJordan's status and thereby made it more important for Jerusalem to maintain open telegraphic communications with the British political and military staff in TransJordan. Initially, this was solely a telegraphic link, but over time, the use of telephones became more common. The disturbances that broke out in TransJordan between 1921 and 1923 (see Chapter 4), also increased the need for the central Government in Amman to have a broad range of telecommunications across TransJordan, linking major towns as well as remote areas to Amman.

By 1925 the Arab Legion headquarters in Amman was connected by telephone to 14 police posts around the country, while the RAF operated a wireless link between Amman and Ma'an. Telegraph and telephone links had been made from Amman to 11 other towns (Annual Report 1925:61-62). While the military had originated this extended communications network, the lines could be used by civilians. The upgrading of existing lines, and the construction of new ones continued apace in the late 1920s. In all these cases, lines were laid both for telegraph and telephones but in the succeeding years, telephones took over as the primary means of telecommunication.

The most progress in setting up the telephone network was made in the more densely settled areas of the northern districts. By 1928, Amman was connected to Zarka and work began on a connection to Deraa on the Syrian border. Southwards, the link between Amman and Kerak across the Wadi Mojib had reached as far as Madeba in 1928. Also in 1928 eleven telegraph operators were qualified to run the system (Annual Report 1928:109-110; Situation Report July 1st-September 30th 1929, CO 831 5/9).

More isolated places were only connected by radio. It was reported in 1928, for example, that Amman was connected to the police post at Azraq 'by wireless and by means of pigeons' (Situation Report January 1st-March 31st 1928, CO 831 1/2).

Because of the higher costs involved in developing telephone connections over longer distances in the south, in 1930 the Government applied to the Colonial Development Advisory Committee [CDAC] for a loan of £11,000 to complete the trunk line as far as Ma'an. At the time of the application, the line had advanced as far as el-Qasr.

£1,000 had been put aside for the connection from el-Qasr to Kerak but the TransJordan Government argued that they could only increase the annual budget on these items at most to between £2-3,000, because it did not envisage the line producing more than £3-400 in revenue per annum. Nevertheless, the line was of importance to public security for which reason a request for CDAC funding was made. (British Resident to High Commissioner, September 17th 1930, CO 831 10/16).

By the time that he sent in the formal application to CDAC in early 1931, the High Commissioner had reduced the loan request to £10,000, along with the estimated likely revenue at £450pa. (High Commissioner to Secretary of State, January 22nd 1931, CO 831 15/2). CDAC were unimpressed by these figures and the justification for the loan. The application was rejected on the grounds that the provision of telephone lines was not within the provisions of the Colonial Development Act.

A further blow to the progress of the Amman-Ma'an link fell in 1931 with the report of the O'Donnell Commission. This had been sent to TransJordan to find ways of reducing Grant-in-Aid, and stimulating more domestic revenue. Completing this link was the main item of expenditure of the Department of Posts, Telegraphs and Telecommunications (PTT). But the Commission lopped £1500 off the PTT budget and so slowed progress on the completion of the link. The Commission, additionally, did not feel enough was being done to generate increased revenues from the existing system. They noted, for example, a bias toward military rather than civilian use of the lines. It appeared that the Arab Legion did not pay for its long distance calls. Commerce accounted for less than half of the traffic, and the Commission expressed unhappiness that the cost of provision of the service exceeded estimated revenue (Report of the O'Donnell Commission [1931], CO 831 16/2).

The onset of the construction of the IPC oil pipeline and the telephone traffic that this generated between 1931 and 1933 had helped, to a degree, to compensate for the fall in telephone revenue which took place during the worst years of the drought. In 1934, however, the pipeline was completed, and there was a fall in total traffic. Nevertheless, the cheaper telephone rates meant that the telegraph became less popular

for commercial traffic, and there was a slight increase in the number of telephone subscribers (**Table 11**).

Table 11: Telephone Subscribers and Trunk Calls 1928-1938

Year	Subscribers	Trunk Calls
1928	223	24,168
1929	285	44,000
1930	321	59,433
1931	345	72,205
1932	371	83,026
1933	403	90,560 [1]
1934	472	98,747
1935	517	101,748
1936	577	107,885
1937	643	118,457 [2]
1938	725	141,489 [3]

(NOTES: 1.Breakdown of trunk calls: Domestic Calls: 71,519; Foreign Calls Despatched: 11,093; Foreign Calls Received: 7,948. 2. Breakdown of trunk calls: Domestic Calls: 91,559; Foreign Calls Despatched: 14,671; Foreign Calls Received: 12,227. 3.Breakdown of trunk calls: Domestic Calls: 120,415; Foreign Calls Despatched: 11,553; Foreign Calls Received: 9,121. Sources: Annual Reports 1928-1938.)

New lines were opened up in the Jordan Valley, linking the police posts at the main bridges crossing the River Jordan, and in villages across the Ajlun district (Annual Report 1934:258). More telephone links were opened up in the Belqa district in 1935, but the Amman-Ma'an link was tied in to the construction of the road across the Wadi Mojib, so was not finally opened until 1939. It had taken nine years to open up this telephone connection (Annual Report 1935:348; Annual Report 1938:401).

International Links

The Mandate period also saw the growth of telecommunications with neighbouring countries. Connections to Jerusalem had been opened under Ottoman rule during the First World War at the same time as the road from Salt to Jerusalem was constructed. By 1927 there were trunk lines connecting Amman to most areas of Palestine, and by 1928 these links were extended to Hosn, Kerak, Madeba, and Zarka (Situation Report January 1st-March 31st 1928, CO 831 1/2). By 1928 it was possible to make onward connections from TransJordan through Palestine to locations in Egypt (Annual Report 1927:79; Annual Report 1928:109). A line from Amman through Irbid to the Syrian border was opened in 1929, and connections to Iraq were established eventually with the completion of the line alongside the IPC pipeline (Situation Report January 1st-March 31st 1929, CO 831 5/9; Annual Report 1935:348).

The Amman Telephone Exchange

There was a slow but incremental growth in the domestic network in TransJordan, and in its international links, as the network expanded and more telephones were installed. By 1933 there were 200 lines in operation 100 used solely by the Government, and 70 of the others by commercial and private subscribers. Together these were placing enormous strain on the country's telephone exchange which was a single magneto facility in Amman. It was calculated that 25 calls were being made on each line per day with 'extremely sharp peaks' (W.K.Brasher, [Chief Engineer, Palestine PTT] 'Report to the Postmaster General, Jerusalem' November 3rd 1933, CO 831 30/4).

As a result in 1933 an application was made to CDAC for the funding of a new telephone exchange. The application was, initially, for a grant of £4,000, three-quarters of which would be spent on equipment to be purchased in the UK for a Central Battery Exchange capable of taking up to 600 extensions, 'so as to improve connections for Administration, Public Security, and commercial purposes and to provide for development' ('Application for Assistance from Colonial Development Fund for the Purchase and Installation of a New Telephone Exchange at Amman, TransJordan', [1934], CO 831 30/4).

While Brasher could not guarantee that the new exchange would increase revenue for the Government, he did argue that the provision of extra lines could attract extra subscribers. In supporting the application, the High Commissioner stressed that the TransJordan Government could not afford to buy the exchange because poor harvests had resulted in tax remittances in TransJordan, and thus, of loss of revenue for the Government (High Commissioner to Secretary of State, November 3rd 1934, CO 831 30/4).

The Colonial Office gave guarded support for the scheme to CDAC. For once, trade rather than public security was the basis for their support for the expenditure; stating that Amman was expanding and needed an enlarged phone system to promote development.

> 'Expansion is now taking place, new buildings are going up and there is a marked tendency towards the centralisation of the country's trade and business in Amman. In order to take advantage of this expansion and to give an impetus to trade and development, it is essential to provide a new and up-to-date telephone system instead of the existing one, which is of an antiquated pattern and is fast becoming worn out...The application is, therefore, one for assistance in a scheme designed to stimulate the development of the country's trade' (Colonial Office Memorandum [January 1935?] CO 831 30/4).

Nevertheless, the opinion of Colonial Office staff was not wholeheartedly in favour of the application as it stood. S.I. James in particular felt that, as presented, the scheme was too vague. He suggested that CDAC would more likely consider a loan than a grant. Kenneth Blaxter felt that the scheme should be presented to CDAC in the context of other applications for various agricultural schemes, and thus tie in the telephone exchange to these developments (Minutes, by S.I.James, November 19th 1934; by K.Blaxter, November 20th 1934, CO 831 30/4).

In their response, the CDAC took a middle position, close to that of James. They acknowledged that a new exchange would 'stimulate the development of the country's trade', but recommended a loan rather than a grant but free of interest payments for the first five years (CDAC to Secretary of State, February 5th 1935, CO 831 33/3). Confirmation of the loan was passed by the Treasury to the Colonial Office early in 1935 (Treasury to Colonial Secretary, February 21st 1935, CO 831 33/3).

It then emerged that insufficient planning had gone into the scheme, and four months after confirmation of the loan, no money had been released because nothing had been done in Amman to house the new exchange. As the High Commissioner observed, 'Certain difficulties have arisen over the provision of accommodation for the new exchange' (High Commissioner to Secretary of State, June 28th 1935, CO 831 33/3). No movement on the acquisition of a building had been made by the end of 1935. Subsequently the Government announced that it was looking for a new building to house both the new telephone exchange, and a General Post Office. (High Commissioner to Secretary of State, January 3rd 1936, CO 831 33/3).

No further progress was made and there the matter rested for nearly three years until it was raised again in the Colonial Office, when Andrews minuted to the effect that the money allocated by CDAC for the new exchange was still available (Minute by Andrews, November 3rd 1938, CO 831 47/3). A few months later a reply came from TransJordan that the Government was proceeding with preparations for a new building and that the new exchange equipment would not be needed until March or April 1941. As estimated costs had risen, it was expected that a new application would be made to CDAC (Alan Kirkbride (Government House, Jerusalem) to Andrews, May 19th 1939, CO 831 47/3).

Nothing happened for a further three years until 1942, when the High Commissioner despatched a long memorandum in an effort to clarify the situation. In this he explained that there had been problems in acquiring a suitable building, and the outbreak of War in 1939 had further delayed progress. By now, however, the situation was desperate. The old magneto exchange had been examined and was considered to be so exhausted it could only last one more year by spending £300 on it.

Needless to say, war traffic had merely aggravated an already overloaded system, and thus the High Commissioner argued that the new exchange was necessary to obviate 'a grave risk of a breakdown in military and civil communications in which the telephone exchange at Amman is an important link' (High Commissioner to Secretary of State, June 15th 1942, CO 831 58/12).

The pressure of war, and, conceivably, the pressure which the Commander-in-Chief of Allied Forces in the Middle East (Wavell) put on the Colonial Office as a result of this threat, led the Treasury to agree a £13,600 loan. The Loan was issued as part of the war effort (War Office to Colonial Office, July 27th 1942; Wilcox [Treasury] to Colonial Office, November 5th 1942, CO 831 58/12).

The Trans-Desert Telephone Circuit

The application to CDAC for a loan to finance a new telephone exchange was not the only communications project in TransJordan paid for by the Colonial Development Fund. Also in 1933, an application was made to CDAC for the funding of a telephone circuit to link Palestine and Iraq via TransJordan. If the impetus for the telephone exchange in Amman was domestic pressure, the pressure for the new circuit was international. The application was made at the time when the IPC pipeline was nearing completion in northern TransJordan. The two principal issues involved were, first, whether the proposed line would run through Syrian territory and come under French influence, or through TransJordan and thus come under British influence. Second, if the line was to pass through TransJordan it would have funding implications for the British Government.

The question of the route to be taken was raised when IPC proposed constructing a telephone line to connect Haifa to Tripoli in Syria, and from there to go on to Haditha in Iraq. If a line were to be constructed along that route, TransJordan would lose out on two counts. On the first, the existing arrangements would continue to apply whereby connections by the British and some other parties between Palestine and Iraq were routed through Cairo or Suez by the Eastern Telegraph Company, or directly from Suez to Basra. On the second count, if the route through Syria was developed, Britain would lose the opportunity to provide a telecommunications link to Iraq wholly within British-controlled territory. There were then, political and economic reasons in favour of Britain supporting a TransJordan-based circuit even if it took some traffic from the Cairo route (High Commissioner to Secretary of State, January 21st 1933, CO 831 24/9).

TransJordan, however, did not have the money with which to finance such a link. The High Commissioner estimated the total cost of the installation of the circuit at £11,000, of which £6,600 would be spent in the UK. Coming to a decision on this scheme was

complicated by a further factor, however. This was the proper role to be played by Government in the provision of telecommunications. No one contested the view that it was vital to British interests that if a new telephone link was to be made between Palestine and Iraq it should pass through TransJordan. The question was, who was going to pay? In the Colonial Office, Kenneth Blaxter argued that since Palestine and Iraq were to be the major beneficiaries of the project, they should fund it (Minute by Blaxter, March 25th 1933, CO 831 24/7). However the suggestion that the private sector, in the form of Imperial and International Communications Ltd, should take over the project, was rejected by officials in Palestine. S.I.James wrote that officials in Jerusalem did not want the Palestine Government's monopoly in telecommunications broken in this way (Minute by James, August 3rd 1933, CO 831 24/8).

Eventually, the High Commissioner proposed that the TransJordan Government should construct the circuit under the supervision of the Postmaster General of Palestine, and with money advanced from the Palestine Government (Williams [Committee of Imperial Defence, Imperial Communications Committee], December 30th 1933, CO 831 24/8). This proposal was accepted, and the Treasury agreed to pass £9,000 through CDAC for this purpose (Treasury to Colonial Office, April 21st 1934, CO 831 30/1). The line through TransJordan was completed by July 1935, having taken only two and a half years to provide from its initial proposal to actual completion. The lack of repeater stations to boost the signals, however, meant that calls could only be made as far as Haditha just inside Iraq (Hall [Jerusalem] to Williams, July 24th 1935, CO 732 68/5) [7].

Two factors might explain why the progress of this project was handled more quickly than the replacement of the telephone exchange in Amman. One was that the argument for the international circuit gave officials the opportunity to uphold the policy that all forms of telecommunications involving British interests should, wherever possible, pass through British territory. The second factor which was most pertinent to the international circuit, was that the IPC pipeline route already provided the basis for the telecommunications link to Iraq. The greater part of the capital cost had been met during the construction of the pipeline. The only major cost to TransJordan was in connecting Government cables to IPC poles. By contrast, the capital cost of the Amman telephone exchange involved no element of international rivalry and seemed to offer only vague developmental benefits to TransJordan. Also, the proposals had been poorly thought out and resulted in long delays to the completion of the scheme.

Other Developments in Telecommunications

Lastly, the records reveal an interesting coda to telecommunications developments in TransJordan toward the end of the Mandate period. The growth of regional telecommunications networks was the subject of a meeting in Cairo of the Cabinet Middle East (Official) Committee, Middle East Communications, between February 26th-28th 1946. The meeting was concerned with establishing what was the proper level of use by civilians in peace time, of trunk lines and equipment that had been established during the War. The representatives from TransJordan, Yacoub Bey Sukhar in particular, complained that the military use of telephone lines was crowding out the private user. The private subscriber should either be allowed more use of existing lines, or new ones should be provided. He specifically referred to difficulties with connections between Amman and the Allenby Bridge, the line between Amman-Zarka-Mafraq, and the line from Amman through Irbid and Deraa to Damascus (Report of a Meeting in Cairo, February 26th-28th 1946, CO 537 1421).

Sukhar also put in a proposal that Mafraq should become the central junction for all calls from Lebanon, Syria and TransJordan going to Iraq, on the grounds that the potential disturbances in Haifa had overloaded the regional exchange there. Behind his proposal was concern over the partition of Palestine and control over TransJordan's external telephone links if Palestine was partitioned. Pointing out that Palestine was no longer an efficient regional or international junction for calls because of the disturbances in the country, the British Empire's Telecommunications Attache (G.Sinclair) was also sceptical of Mafraq having either the equipment or the experience to handle a regional and international exchange. He understood that the Arab states wanted regional communications to be independent of 'non-Arab transit areas such as Palestine', from fears that Jewish-controlled areas of Palestine would control regional and international telephone traffic (G.Sinclair, 'Note on the Middle East Telecommunications Network in Relation to Palestine as a Transit Authority', August 17th 1946, CO 537 1421).

CONCLUSION

TransJordan's transport and communications infrastructure underwent a profound transformation during the Mandate period, matching technological innovations, and the infrastructural demands of the economy. In 1921 motor vehicles and telephones were a novelty, by 1946 they were commonplace, though owned by only a very small percentage of the population. The Mandate administration initiated the changes which led to the expansion of TransJordan's road network, by the widespread upgrading of the existing pattern of rough earth tracks and the construction of motor tracks and all-weather roads. While these changes were of greater benefit to the central Government

in its endeavours to impose authority across TransJordan from Amman, they also served a wider economic and social purpose.

Transport and communications innovations in the Mandate period transformed TransJordan's spatial contours, orienting human movements more closely to the cultivable zones of TransJordan than ever before. Even though the aeroplane of the day was primitive by today's standards, and though motor vehicles were sorely tested by the rugged conditions of the countryside, their impact was phenomenal. Villages that had been a gruelling day's ride away by pack animal at the start of the Mandate period, could be reached within hours by car in 1946. The telephone linked Amman to Aqaba instantly -prosaically, perhaps, given that an overloaded switchboard might have asked the caller to wait. The world outside TransJordan was also within the orbit of the telephone in a way that it had not been in Ottoman times. These were the trappings of the modern age, and were a radical departure from the previous fifty years in terms of mobility and interpersonal contact. The physical infrastructure was also improved, though it is the case that the mere existence of roads and vehicles did not mean that economic activities were stimulated automatically as a result. Physically, too, there were still villages in the countryside that were isolated from the most modern means of transport.

By themselves transport and communications could only facilitate activities whose intentions originated elsewhere. They were a means to an end. To this extent, it is misleading to evaluate success or failure of this part of infrastructural growth by counting the length of roads or the number of telephones, without situating these figures within a broader perspective. To be sure, popular enthusiasm for roads was widespread if not universal, but the low level of provision from which most villages were beginning suggests that **any** improvement would have been welcome. Thus, the fact that most roads were not metalled is not deplorable, the economy would not have performed that much better than it did if they had been.

From a social point of view, the growth of motor vehicles was one important factor in the decline of the pastoral economy of the desert-based tribes. Where once the camel reigned supreme, by the late 1930s, even as camel stocks and the camel markets were being revived, the tribes nevertheless depended less on them as an economic resource and a transport facility. This too was part of that contraction of TransJordan into manageable space, as it reduced the scope of the mobility of the tribes to within TransJordan's international boundaries, bringing them into a closer relationship with the sedentary population.

The sluggish nature of TransJordan's economy for much of the Mandate period -partly as a result of the drought years- meant that overall growth in transport and

communications was slow until the Second World War. The 1940s saw the War accelerate developments. The stock of military vehicles increased rapidly, and telephonic and telegraphic traffic also increased as part of the War effort. Thus, it was the state which continued to benefit more from these developments than the economy, so that even in 1946 the infrastructural foundations were being laid on which the independent state could build.

NOTES

1. Wheeled traffic reappeared in Palestine at an earlier date, in the 1860s, when immigrants from Germany and the USA used wheeled carts for the carriage of passengers and freight. See Kark 1989:58.

2. Consul Devey 'Report on the Trade of Damascus for the Year 1910' (Accounts & Papers XCVII [1911], No 4802, p5. refers to the popularity of bicycles in Damascus. Although there were a handful of bicycles in TransJordan toward the end of the Mandate period, it is not known when they made their first appearance or how widespread they are.

3. A map of TransJordan prepared by the Egyptian Expeditionary Forces in 1917 shows that the all-weather road beginning in Aqaba terminated at Ma'an, Lawrence does not mention this.

4. In order to maintain their own claim that Umm Jemal be part of Syria, French forces built a parallel road on their side of the border. The border -not demarcated until 1932- was the line fixed by the Franco-British Convention of December 23rd 1920. For the correspondence on the incidents at Umm Jemal, see High Commissioner to Colonial Secretary, February 21st 1928; Amir Lewa [Arab Legion] to Peake, as reported to the British Resident, February 25th 1928; and Group-Captain L.Rees [RAF] to RAF HQ, February 27th 1928, in CO 831 1/1.

5. According to Glubb (1948:61) the incident took place in 1925, and order was restored by Peake with a force of 600 men. For another view, see Rudd (1990:179), who cites Peake and Cox's anxiety that the incident got out of hand because political agitation in the countryside had lowered the morale of the Arab Legion.

6. During the Mandate period, telegraph poles were made from metal, and supported by a stone base. This was because of the damage caused in the southern districts by camels, who used the wooden poles to scratch their backs (Quarterly Report ending March 1933, FO 371/16926).

7. The first telephone conversation between Jerusalem and Baghdad took place on November 27th 1935, between the Chief Secretary of the Palestine Government, J.Hathorn Hall, and the Prime Minister of Iraq, General Yasin Pasha el-Hashemi. The line from Baghdad to Jerusalem went over the TransJordan connection, and was routed through Ramallah. See The Times November 28th 1935,p13.

CHAPTER EIGHT

THE PROVISION OF HEALTH CARE

Introduction

The next two chapters will focus on two major elements of TransJordan's social infrastructure -health care and education- and consider how the Mandate administration developed these services. This chapter will examine the provision of health care in the Mandate period by looking at health administration, the campaigns against infectious diseases, clinical care in the government and non-government sectors, and the public health regime.

Health care had not been developed to any significant degree in the late Ottoman period. Clinical care was confined to the hospital in Salt run by the Church Missionary Society [CMS], which was established in the 1880s, while during the First World War it seems that the Ottoman military authorities created a small hospital in Amman. But there were no health clinics or quarantine stations, and few private doctors. Details on even these limited services are lacking.

TransJordan was prone to outbreaks of infectious diseases, of which the most common were malaria, measles, dysentery, typhoid and tuberculosis. Cholera was not indigenous to TransJordan but was a threat when imported into the country by travellers from neighbouring countries [1]. The aetiology of TransJordan's infectious diseases suggests that they derived from poverty, malnutrition, and the overcrowding in houses and settlements that was common, particularly in the towns and villages. To this must be added the close physical proximity with which many people lived to their animals, such as oxen, donkeys, sheep and goats. The chronic shortage of water in drought years was also a factor, often driving people to use impure water for drinking purposes. All of the above factors reduced the threshold of vulnerability to infection, providing any administration with formidable tasks in the prevention, treatment and education in the hazards of such infectious diseases.

1. Health Administration, Policy, and Personnel

Health Administration and Policy

At the outset of the Mandate period, most of the limited health care in TransJordan was provided by foreign missionaries. The Mandatory powers were not given any explicit obligations by the League of Nations beyond the injunction to combat the spread of infectious diseases (Article 23 [f] of the Covenant of the League of Nations, in

Northedge 1988:326). This obligation was included in Article 20 of the Mandate for TransJordan (Text of the Mandate for Palestine and TransJordan [1922], CMD 1785).

Details on the administration of health care in TransJordan between 1921 and 1924 are lacking. All that is known is that there was official concern about the prospects of cholera being brought into the country, principally by pilgrims during the annual 'Hajj'. To guard against an epidemic, a quarantine station was set up at Ma'an in late 1921 (Samuel to Churchill, October 25th 1921, CO 733/7). The Department of Health [DOH] was created some time between 1921 and 1924, but did not submit any annual reports until 1926, while other reports on the administration of TransJordan before this date make no reference to the operations of the DOH.

The new regime under Cox which began in 1924 reorganized the administration of TransJordan along more legal and constitutional lines than had existed before. As part of this reorganization the DOH was put under the charge of a medical officer originally from Palestine, Dr G.W.Heron. His staff consisted of one itinerant inspecting medical officer, and eight District Health Officers [DHOs] based in the larger towns and villages across TransJordan (Annual Report 1925:61).Above Dr Heron was the Minister of Health, a position held by Dr Halim Abu Rahmeh from 1926 to 1939.

The DOH acquired a wide range of responsibilities. These included the collation of statistics on births and deaths. In 1926 the Public Health Law required certain individuals, such as sheikhs, mukhtars, Imams, midwives and family relatives to notify the DOH of births and deaths (Public Health Law 1926, in CO 831 7/2). However, at this stage it appears that these legal obligations were not enforced by the Government, with the result that the notification of births and deaths was a practice left to the discretion of responsible individuals.As no census was taken in the Mandate period, the statistics on population are approximations only.

Aside from the obligations laid down by the Covenant of the League and the text of the Mandate, the administration did not produce a coherent statement of health policy. Rather, the parameters of the DOH's activities were set by public health legislation, which also suggests that the administration tended to respond to events as they occurred.

In this way,the particular duties of the DOH tended to generate their own short and long term objectives, as was the case with the campaigns against infectious diseases. In only one case was there an explicit policy decision. This was made in 1935 following Norman Maclennan's report on the health of the desert-based tribes, which led to the provision of better health care for people living in the desert areas, who had previously been entirely neglected (see section 3 below).

Personnel

In 1927 the total number of medical staff employed in government service was 12, mainly the DHOs based in the larger towns and villages across TransJordan. **Table 12** indicates the slow growth in the number of qualified medical personnel working in TransJordan. Not surprisingly, in 1927 it was reported that 'the country is in need of more medical practitioners, pharmacists, dentists and especially midwives' (ARDOH 1927:2), and this remained true throughout the Mandate period. For example, the number of doctors and dentists grew from 10 in 1928 to 40 in 1943, or about 1 per 30,000 of the population.

Table 12: Medical Personnel in TransJordan 1928-1943

Year	Physicians	Dentists	Pharmacists	Midwives
1928	8	2	-	-
1929	7	1	1	
1930	3	-	1	1
1931	6	-	2	1
1932	5	-	-	1
1933	7	1	1	2
1934	6	2	1	2
1935	18	6	4	4
1936	19	5	4	7
1937	19	5	5	11
1938	24	6	5	9
1939	24	7	6	9
1940	24	8	6	12
1941	26	8	6	11
1942	26	10	9	14
1943	30	10	9	14

(Source: Konikoff 1946:120)

The lack of trained midwives was one of the reasons regularly cited for the high incidence of infant mortality in TransJordan.(see below). Midwives were sent to Palestine for training on 6-week courses, but Cox made no effort to extract more money from the Colonial Office for a more intensive midwifery training campaign. Rather, he insisted that each municipality should fund training itself. As indicated in **Table 12,** this practice only produced 14 trained midwives in the whole of TransJordan by 1943 (Minute by James, April 22nd 1936, CO 831 36/7). The provision of pharmacologists and dentists also did not appreciably expand in the Mandate period.

Figures were collected between 1927 and 1931 which indicate the nationality of TransJordan's medical personnel. These figures show that the majority of licenses granted to physicians by the DOH were granted to Arabs from Palestine, Syria, Egypt, Lebanon and Iraq. About six to seven physicians with licenses were native

TransJordanians. Other individual licenses were issued by the DOH to Europeans of various nationality. A similar range of nationality is found for the pharmacists and dentists, though there were fewer Europeans among this number. Apart from an Italian midwife working in Amman, the licensed midwives were all Arabs (ARDOH 1927-1931)

In addition to the medical personnel, the DOH employed trained sanitary inspectors whose duties were to inspect public and private buildings and monitor standards of hygiene, and also register and inspect the country's water supplies in connection with the campaigns against infectious diseases. In 1927 there were nine sanitary inspectors based in Amman, Jerash, Ajlun, Madeba, Kerak and Ma'an. By 1932 there were four more who had been trained in Jerusalem, though the view was that this was still not adequate for TransJordan's needs. (Annual Report, Department of Health 1927, CO 831 2/2; Annual Report 1932:223-224; Annual Report, Department of Health 1933, CO 831 32/1).

In sum, the Mandate administration did not begin to coordinate health care policy until after 1924, and this was done primarily through the medium of public health legislation. With such a small staff the job of the DOH was mainly to attempt to enforce the law, and to monitor health regulations. The lack of trained medical personnel was most keenly felt with regard to infant welfare, dentistry and pharmacology. In spite of these deficiencies, in 1926 the DOH embarked upon sustained campaigns to prevent and control infectious diseases which had some success. These campaigns will now be examined

2. The Campaigns Against Infectious Diseases

Infectious diseases in TransJordan during the Mandate period were caused by two factors. One factor was the environment. For example, malarial mosquitoes were attracted to the humid conditions of the Jordan Valley, and also used other wet areas of the plateau for breeding. This made the Jordan Valley a hazardous area, and increased the problems in areas of the plateau around perennial springs, wells, cisterns, and reservoirs that were without mosquito-proof cover. The desert area tended not to be infested with mosquitoes, but was hazardous with regard to sandfly, and health problems associated with a lack of water, fresh fruit and vegetables. The second factor was human, and the low threshold of vulnerability to infection by most of TransJordan's population. The poor and people living in crowded settlements were most at risk. Overcrowded accommodation, and the close proximity of animals to living quarters meant that the transmission of infection by lice, fleas, and flies was common. Thus, common diseases were measles, dysentery, typhoid, tuberculosis, malaria and trachoma. Incidences of venereal disease were also high.

The Campaign Against Malaria

The campaign to prevent and control malaria began in 1926 and was coordinated by a medical officer from Palestine. The campaign was based on two forms of activity. The first was the identification of the location of the breeding grounds of malarial mosquitoes. In 1926 the first areas that were surveyed were in the northern section of the Jordan Valley in the vicinity of Adasiya, and in the south along the western and southern edges of the Dead Sea. However, this was just the beginning of a long term campaign to register all of TransJordan's 'wells, cisterns, and other possible breeding grounds'. Once these breeding grounds had been located, they were subjected to various forms of treatment, depending on the nature of the water source. Where there were springs or streams, vegetation was cleared away, and banks were reinforced. Cisterns and wells were oiled, and provided with iron lids. These activities were carried out by medical officers and sanitary inspectors, while much of the labour was provided voluntarily by villagers. In 1926 more than 40km of streams and canals were treated, in addition to wells and cisterns (ARDOH 1926:4-5; ARDOH 1927:13-15).

Once the system of inspection and registration of water supplies was under way, the DOH began to embark on the second activity, to try and control the disease amongst the population, largely through a system of vaccination and other forms of treatment. **Table 13** shows that this aspect of the campaign, in addition to the activities mentioned above, did appear to succeed in reducing the incidence of malaria:

TABLE 13: Recorded Incidences of Malaria, 1927-1938

YEAR	INCIDENCES
1927	8,972
1928	5,296
1929	2,605
1930	1,476
1931	1,454
1932	1,283
1933	1,876
1934	2,736
1935	5,435
1936	2,791
1937	2,791
1938	2,212

(Source: Annual Reports 1926-1938; ARDOH 1927-1938.

In those years, such as 1934 when there was an increase in recorded incidences, this was due to the continuation of the drought, and people going to the Jordan Valley in search of water. Another factor was the opening of the thermal baths at Zarka Ma'in, which had been allowed to operate even though they were not mosquito

proof.(ARDOH 1934:17) [2]. The increase in infections in 1935 correlated with the abundance of winter rains. The land had retained its moisture, while the extra effort needed to harvest the abundant crops that year prevented cultivators from taking time off to keep their streams and canals clear of mosquito-breeding vegetation. Workers with the IPC oil pipeline were also at risk as the pipeline crossed the Jordan Valley (Annual Report 1935:324).

In sum there was, in general terms, a considerable degree of success with the anti-malaria campaign. While there were setbacks, these were not due to faults with the DOH's procedures but uncontrolled human behaviour. Furthermore, as a consequence of the campaign against malaria, people became used to the idea of being given clinical treatment for their ailments. While the registration and inspection of water supplies across TransJordan helped to combat malaria, it also helped with the improvement to the country's water supplies, and it provided the TransJordan Government with an ever-growing data base on the country's water supplies.

Other Infectious diseases

Although the campaign against malaria appears to have been the most outstanding success of the Mandate period, other campaigns, often of short duration, were undertaken. When, for example, there was an outbreak of smallpox in 1932, the prompt notification to the DOH that the infection had spread from Syria into northern TransJordan almost as far south as Amman produced a swift response from the DOH. Within a six-week period, 55,000 people were vaccinated and the disease isolated before it reached Amman. Other outbreaks of smallpox took place in the 1940s, 1943 was a particularly bad year, but these epidemics were also contained (ARDOH 1932:8; Annual Report 1932:222).

Apart from the campaigns mentioned above, the DOH's other attempts to prevent and control the spread of infectious diseases were often handicapped by factors beyond their control. **Table 14,** for example, gives a profile of five of the most pernicious diseases that affected TransJordan. **Table 15** gives a clearer picture of the geographical incidence of diseases, focusing on dysentery. The sharp differences between numbers of dysentery cases in Salt, Amman, Irbid and Kerak between 1926 and 1934 is of interest here and demonstrates that major improvements in health depended on people having access to clean water, and of the provision of sewage systems in the towns. Dysentery, like typhoid, is a water borne disease most commonly associated with faulty sewage disposal.

In 1927 it was reported that a drainage scheme in Salt had reduced the incidence there of typhoid by 50% on previous years (Annual Report of the Department of Health 1927, CO 831 2/2). However, as **Table 15** indicates, cases of dysentery in Salt

increased over the years for which the geographical distribution of disease was recorded, because sewage disposal remained ineffective. It was explicitly blamed for the increase in dysentery cases, as 'drains lead to the vegetable gardens and the attempts of our Department for several years to remedy this situation have not so far been fruitful' (ARDOH 1933:15) (See section 4 below).

Table 14: Incidences of Selected Diseases, 1926-1939 (Deaths in Brackets)

Year	Dysentery	Influenza	Measles	Tuberculosis	Typhoid
1926	128 [4]	406 [94]	265 [45]	326 [30]	58 [5]
1927	92 [1]	43 [8]	137 [30]	254 [35]	68 [6]
1928	157 [1]	65	192 [18]	n/a	45 [9]
1929	119 [3]	n/a	2,360 [278]	n/a	33 [5]
1930	122 [12]	n/a	1,433 [128]	227 [56]	51 [5]
1931	196 [6]	73 [12]	69 [13]	n/a	100 [12]
1932	152 [5]	615 [23]	425 [48]	n/a	94 [8]
1933	273 [4]	1,086 [41]	2,010 [185]	n/a	132 [14]
1934	221 [5]	746 [77]	719 [77]	n/a	120 [9]
1935	185 [5]	254 [8]	1,208 [169]	532	163 [16]
1936	303 [4]	1,365 [46]	1,102 [133]	595 [40]	102 [10]
1937	219	648 [20]	538 [70]	624 [33]	165 [11]
1938	216 [4]	369 [4]	688 [52]	482 [2]	144 [18]
1939	203 [1]	319 [12]	1,670 [69]	n/a	137 [5]

(Source:ARDOH 1926-1939)

Table 15: Regional Breakdown of Cases of Dysentery, 1926-1934

Town	1926	1927	1928	1929	1930	1931	1932	1933	1934
Amman	66	57	65	33	42	27	38	35	19
Salt	15	1	18	20	36	39	69	129	63
Irbid	15	8	17	21	7	11	25	49	87
Kerak	12	21	16	12	25	17	4	3	2

(Source: ARDOH 1926-1934)

In spite of these shortcomings, the DOH, on a small budget, and with a small staff, gained the trust of the general population and carried out a sustained programme of vaccination against infectious diseases which, at the very least, protected them from getting out of control. The problem of infectious diseases, however, also generated needs for the provision of health care at the clinical level. Such provisions, in both the government and non-government sector will be examined next.

3. Clinical Care

Clinical Care in the Government Sector

At the outset of the Mandate period, almost all of the clinical health care provision in TransJordan was to be found in the non-government sector. It seems likely that the Ottoman military authorities during the First World War built a small hospital in Amman for the use of troops. When facilities at the Government Hospital in Amman were upgraded in 1926, it was referred to as an improvement to the municipal facility that had previously existed, perhaps the hospital built by the Turks (Annual Report 1926:70). At the time, this was the only Government hospital in TransJordan to supplement the CMS hospital in Salt.

In spite of this shortage of clinical care in TransJordan in the government sector, there is no evidence that efforts were made to improve upon it until after the reorganisation of TransJordan's administration in 1924. In 1926 the new Government Hospital with 20 beds was opened, though in fact the building was a converted house and not a purpose-built hospital. There had been a discussion about building such a purpose-built hospital, but the idea was shelved 'owing to lack of funds' (ARDOH 1926: ARDOH 1927:1).

In addition to the Government Hospital in Amman, the DHOs operated dispensaries at eight locations across TransJordan, in Irbid, Jerash, Amman, Salt, Madeba, Kerak, Tafila, Ma'an, and Aqaba [**3**]. The DHOs ran clinics from the dispensaries, and undertook itinerant work, when possible, in neighbouring villages, but had no surgical facilities. Other than these facilities, there were six stationary epidemic posts in Irbid, Jerash, Amman, Kerak, Ma'an and Aqaba, which had eight beds, or, in the case of Jerash and Aqaba, four beds each. There was also a mobile epidemic station with forty beds for use in emergencies. By 1926 there were three permanent quarantine stations, at Remtha on the Syrian border, at the Amman Hejaz Railway station, and at Ma'an. (ARDOH 1926:3, 51; Annual Report 1927:79).

The lack of adequate hospital care in the Government sector became more acute in the late 1920s and early 1930s. This was due in part to the problems experienced by the CMS at their hospital in Salt (see section 3 below), which reduced overall bed capacity in TransJordan. The opening of a 12-bed Government hospital in a converted house in Irbid in 1934 made little overall difference in this regard, though it was of great benefit to Irbid and its environs in the long term (Annual Report 1935:324).

But the shortage of beds was also due in part to the consequences of the drought. Poverty and malnutrition increased the demands for hospital beds, but there was no appreciable expansion to meet this demand. In their submissions to the Colonial

Office, the DOH pleaded for more money for the health budget, but without success. The Director of Health, Dr Heron regularly complained that:

> 'In general, the Department of Health of TransJordan was conducted with surprising efficiency considering the small credits available, but it is clear that many of the services considered essential in other countries have to be almost entirely neglected. Clearly the Government of TransJordan have not regarded the matter sufficiently seriously, in spite of constant representations of the Director'. (Heron to High Commissioner, February 6th 1934, CO 831 28/5).

Up until 1934, TransJordan was spending £13,000 a year on health, which amounted to no more than 3.4% of the total budget. The main problem here was that the Mandate administration had looked to agriculture to provide the bulk of TransJordan's domestic revenue, rather than seek extra funds from H.M.Treasury's Grant-in-Aid. However, the protracted drought meant that domestic revenue did not expand as it had been hoped (Annual Report 1933:369). At the same time there was an increase in demand for medical care from the population.

This situation began to change only later in 1934, largely through the efforts of Glubb, whose primary concern was with the desert-based tribes who had no medical facilities whatsoever. Moreover, Glubb had been using his own money to pay for the health care of tribesmen, and was concerned that medical facilities be extended to the desert areas (Glubb to Colonial Secretary, June 3rd 1935, CO 831 31/17). Glubb's pressure led to the appointment of Norman Maclennan, to report on the health conditions of the desert-based tribes, and in turn, this report led to an increase in the DOH budget. Provision was made to build general hospitals in Amman and Irbid, and to provide the desert areas with a mobile medical facility (see below).

The Government Hospital Project for Amman

In the aftermath of Maclennan's report, it was recommended in 1935 that Amman increase its clinical provision in the government sector by replacing its existing hospital with a new general hospital, at a cost of £40,000. It was claimed that it would take two years to build, and that its recurrent costs would be £6,624 a year. In their submission to CDAC the TransJordan Government envisaged that savings would be made by not having to pay rent on the new building, and, unlike the old, by reducing the cost of hiring clinical services from the non-government sector. Some revenue was expected from fees charged for treatment, operations, and others services, but these did not amount to much more than £2,100 pa (Application to CDAC for the Construction of a General Hospital in Amman, enclosed with British Resident to High Commissioner, January 2nd 1935, CO 831 33/8).

From the very beginning this project was subjected to endless delays. Even before CDAC had been given the chance to consider the application, the High Commissioner's office in Jerusalem and the Colonial Office initiated a wearisome sequence of correspondence which sought alterations to the specifications of the proposed hospital building. The Colonial Secretary expressed the view that £40,000 was a lot of money and that 'In view of the high cost of the scheme it is important to ensure that provision is made only for what is essential' (Colonial Secretary to High Commissioner, July 25th 1935, CO 831 33/8). As a result the proposal to CDAC was temporarily withdrawn to enable the Directors of Health and Public Works in Palestine to reconsider the specifications of the hospital (High Commissioner to Colonial Secretary, March 9th 1937, CO 831 42/5).

Two years after the Government Hospital project was originally drawn up, a revised scheme, now to cost £56,000 was submitted to CDAC, only to be rejected. CDAC took the view that while it was an important project, the provision of clinical care did not fall within the remit of the Colonial Development Act, and that it was entirely the responsibility of the TransJordan Government (CDAC to Colonial Secretary, June 30th 1937, CO 831 42/5).

After the rejection of the scheme by CDAC, the only other source of funds TransJordan could call on was the Treasury, under Grant-in-Aid. Although in previous years they had resisted pleas for more money for the health budget, Downie in the Colonial Office made a strong case for TransJordan. He argued that funding the project would bring great prestige to the British Government. He also argued that the Italian National Association had opened a 40-bed, purpose-built hospital in Amman beside which the existing Government Hospital was 'little more than a hovel' (Downie to Treasury, November 27th 1937, CO 831 42/5). The Treasury agreed to fund the project, offering £27,000 for the first year. But they also insisted that in providing the funds, they expected the TransJordan Government to operate a cash limits rule over the DOH budget and that 'while the hospital is being constructed every effort will be made to postpone other works which are not immediately necessary in order to minimise the effect upon Grant-in-Aid' (Phillips [Treasury] to Colonial Secretary, December 24th 1937, CO 831 42/5).

In fact, no record has been found to suggest that the Government Hospital was ever built before the end of the Mandate. Wrangling over the specifications continued to delay the project until the outbreak of the Second World War. Then, when Italy joined the War on the German side, all Italians were expelled from TransJordan, and the TransJordan Government acquired the 40-bed, purpose-built hospital in Amman that the Italian National Association had opened in 1930, and their hospital at Kerak which

had been opened in 1935 (Administration Report for the Quarter ending June 1940, CO 831 55/7).

The Desert Mobile Medical Unit

Before the mid-1930s the DOH provided no clinical care for the desert areas. Members of tribes relied either on the facilities available in the sedentary zone, at epidemic posts, or quarantine stations, or on the generosity of Glubb. It seems that 'folk-loric' practices were used, but that the tribes did not have a developed system of 'tribal medicine' as it was known, say, in Africa (Maclennan 1935:232).

There is no doubt that there was a great need for professional care in the desert areas. Incidences of infectious diseases such as malaria and typhus that affected many in the sedentary zone, also affected those tribes that migrated to areas such as the Jordan Valley in the winter months or had extensive contact with the sedentary population, for example, at markets. Also, the consequences of the drought lowered the threshold of vulnerability to disease, and was compounded by the tribes' lack of access to a good supply of fresh fruit and vegetables. Many tribes, particularly their poorer members, lived on a diet of bread, occasionally varied with dairy products (Maclennan 1935:233).

In the wake of Maclennan's report, the Desert Mobile Medical Unit [DMMU] was created in late 1936, and began work in April 1937. Initially it was entirely a mobile operation, though it was hoped in the long term to establish permanent clinics at selected desert forts. Otherwise, the mobile clinic followed the movements of the tribes in their migrations east of the Hejaz Railway. In 1937 clinics were held from April to December at nine locations in the desert, and 10,661 people were treated. The following year clinics were held at seven locations and 14,672 people were treated (ARDOH 1936:34; ARDOH 1937:36; ARDOH 1938:34).

Infant Welfare Provision

Although major, and successful efforts were made to control and prevent the spread of infectious diseases, the situation with regard to infant mortality and child care was not dealt with in similar fashion. The figures show that infant mortality rates were high in the Mandate period:

Table 16: Infant Mortality Rates per 1000 under 1-yr

Year	Rate
1926	131
1927	163
1928	184
1929	205
1930	222
1931	194
1932	210
1933	220
1934	242
1935	211
1936	201
1937	203
1938	181
1939	173
1940	172
1941	168
1942	153
1943	151

(Sources; Annual Report Department of Health for 1933, CO 831 32/1; Konikoff 1946:106)

It will be observed that after the initial registration of births and deaths in 1926 had begun, there was a rise in the recorded incidences of infant mortality. This might be due to the fact that more people than before were encouraged to register births and deaths. But the key factors in infant mortality were the impact of the drought, and the general health problems associated with poverty, overcrowded and unsanitary living conditions, and ignorance of hygienic practices with regard to the care of babies. Consequently, the diet of many people was poor, leading to the undernourishment of mothers and inadequate feeding of babies; the quality of clothing was poor, and if mothers in the rural areas had to work in the fields, babies would often be left in the care of young children. The lack of education for many girls in schools also meant that simple and routine hygiene practices were not transmitted to reduce infant mortality.

There were no adequate infant welfare clinics in TransJordan. The CMS in Salt ran a small clinic, while in Amman, the infant welfare clinic was run by the wife of the British Resident, Lady Cox (and by Lady Kirkbride after her). In Amman, the clinic was open for a few hours on a week-day, though home visits were also made. The function of the infant welfare clinics was to give advice and demonstrate practical methods for nurturing child health. As far as 'medicaments' were concerned, the budget of the infant welfare clinic in Amman was limited to the provision of milk and cod liver oil.

Other Provisions in the Government Sector

Two other forms of clinical care in the Government sector should be mentioned. Under Public Health legislation, the DOH was responsible for the inspection of schools, of both the pupils there, and the premises. This gave the DOH the opportunity to make regular inspections of schoolchildren and was considered an important means of providing health education in matters of personal hygiene in order to combat diseases such as trachoma. Examinations in 1934 revealed that from one sample of 6,862 schoolchildren, 1,521 suffered from trachoma (Annual Report 1934:257). Over time, the DHOs trained schoolteachers to carry out simple examinations to detect trachoma. This relieved the DHOs of much labour intensive work, but also meant that schoolchildren received some ophthalmic care on a regular basis (Annual Report 1935:325).

The second feature of this service for schools was its extension to the general population in 1936. Ophthalmic clinics were opened at the Government dispensaries across TransJordan, and in the non-government sector. Attendances between 1936 and 1938 revealed a high proportion of eye diseases. In 1936 there were 9,652 cases, in 1937 12,913 cases, and in 1938 10,327 (Annual Report 1938:376). Finally, there was no provision of care for the mentally ill in TransJordan during the Mandate period. Concern over conditions in the central prison in Amman was expressed in the Colonial Office in February 1927, when it was stated 'the need for reform is desperate'. A small 4-bed ward was opened in the prison later that year which was also used to treat the mentally ill as well as prisoners (Minute by Robinson, February 23rd 1927, CO 733 177/8; Cox to High Commissioner, January 18th 1934, CO 831 28/5)

Clinical Care in the Non-Government Sector

During the Mandate period in TransJordan, clinical care in the non-government sector was provided almost exclusively by foreign missionaries, the CMS, the Italian National Association [INA], and an English protestant, Dr Charlotte Purnell. For a brief period in the 1920s there was a private hospital in Amman, run by a Turk, Dr Sonyal. This had a bed capacity of between 27 and 30, and Sonyal had considered building a new hospital in 1928, but the following year he died and his hospital in Amman was closed (ARDOH:1928:15; ARDOH 1929:179). The only other private clinical care was the 8-bed clinic in Mafraq provided by the IPC for workers on the oil pipeline from Haifa to Kirkuk (ARDOH 1933:31).

As indicated in **Table 17** the non-government sector had marginally more beds than the government sector throughout most of the Mandate period. **Table 18** shows that the non-government hospitals treated a greater number of in-patients but that more patients were seen in government clinics. This is largely because the government ran

the several clinics already referred to across TransJordan, whereas the non-government sector only provided such facilities at Salt, Amman, Kerak, and small villages in Ajlun and the Belqa on an itinerant basis. One other factor to note is the fluctuation in bed-capacity in the non-government sector hospitals, a consequence of the financial problems of the CMS and the English Mission Hospital in Amman, which will be discussed below.

Table 17:Bed-Capacity in Government and Non-Government Hospitals

	Government	Non-Government	Total
1926	60	81	141
1927	60	99	159
1928	60	71	131
1929	60	78	138
1930	70	90	160
1931	70	91	161
1932	70	91	161
1933	70	99	169
1934	70	79	149
1935	74	107	181
1936	74	117	191
1937	74	117	191
1938	74	96	170
1939	76	127	203

(Source:ARDOH 1926-1939)

Table 18 Admissions to Government and Non-Government Hospitals and Clinics 1928-1943

Year	Govt Hospitals	Govt Hospitals	Govt. Clinics	Non-Gov t Hospitals	Non-Govt Hospitals	Non-Govt Clinics
	Admissions	Deaths		Admissions	Deaths	
1928	512	n/a	74,181	1,221	n/a	32,708
1929	448	n/a	80,716	999	n/a	14,841
1930	533	n/a	97,786	980	n/a	14,047
1931	508	29	110,921	968	49	20,560
1932	508	29	135,426	1,031	55	20,510
1933	545	34	132,160	1,105	73	21,143
1934	563	56	154,545	1,081	66	25,331
1935	750	53	177,104	1,529	93	28,294
1936	954	46	192,958	1,669	82	25,117
1937	933	51	220,452	1,828	81	30,641
1938	947	56	256,708	2,118	71	43,026
1939	1,175	43	254,782	2,287	94	54,554
1940	1,296	63	273,011	2,288	106	72,468
1941	1,553	40	185,146	2,495	157	59,617
1942	1,891	61	196,609	3,003	161	50,357
1943	1,869	48	167,728	2,876	139	35,031

(Source: Konikoff 1946:120)

The Italian National Association

The Italian National Association [INA] set up a 20 bed hospital in Amman some time after the First World War. It chose Amman because the CMS already had a long-established hospital in Salt. By 1929, bed capacity in the INA hospital in Amman had risen to 28, and in 1930 they opened a purpose-built 40-bed hospital there, complete with a modern operating theatre and x-ray facilities (Annual Report 1927:79; Annual Report 1929:159; Annual Report 1930:215). The INA also opened a new 36-bed hospital in Kerak in 1935, but in 1940, as was mentioned above, the TransJordan Government expelled Italians from the country and took over their premises for their own use.

The English Mission Hospital, Amman

The English Mission Hospital [EMH] in Amman was founded by an English protestant, Dr Charlotte Purnell (1868-1944) [4]. She had originally joined the CMS mission in Salt in 1913, but after the First World War she resigned from the CMS and moved to Amman. There she bought a house and converted part of it into use as a dispensary. By 1924 more conversion had turned the house into a small hospital for women with 14 beds, and six cots for children (Letter from Purnell to London, November 23rd 1919, CMS/CM/G3/PP6; Minutes of the Medical Sub-Conference April 3rd-4th 1922; Minutes of the Sub-Committee of the Medical Conference February 20th 1924; Report of the Palestine Delegation November 1926, CMS/CM/G3/PP7).

By the mid-1930s the bed capacity of the EMH had risen to 21, but Purnell was not in good health and in late 1936 she returned to England for a year, leaving the hospital in the care of the CMS. Although Purnell returned to Amman in late 1937 her weak health and difficult personality led to a high staff turnover and a fluctuating intake of patients. Eventually, Purnell conceded that the hospital would have to close, though she hoped to keep the dispensary open (WHS to JGM December 4th 1937; Report by Dr Purnell [1938]; Bishop to Purnell August 16th 1938, SAC/JEM/12b/1).

The EMH appeared to have closed for good in June 1939, but in fact it was kept open by another missionary group, the Bible Lands Aid Society, who ran it until 1941. The hospital was temporarily closed again until 1944 when it was taken over by the Arab Legion for their own use (Bishop to Kuenzler, May 27th 1939; JGM to Rev.C.Northway June 12th 1940; Bishop to Rev.T,Pearson June 22nd 1941; Bishop to JGM September 29th 1944, SAC/JEM/12b/1).

Although the EMH never received any form of subsidy from the TransJordan Government, the fact that the hospital provided treatment, and in-patient services for

women meant that the Government did not want to see it closed. This was also important because, prior to 1940 there had been no real expansion in bed-capacity in the government sector. It is also the case that in the other main area of clinical care available in the Mandate period, the CMS also had difficulties in the Mandate period.

The Church Missionary Society [CMS]

CMS activities east of the River Jordan began in the 1880s when a mission was established at Salt. In addition to evangelical work in Salt, the CMS opened a small hospital there. Prior to the First World War, the CMS was also working in the village of Hosn, and had conducted itinerant medical work in Kerak. The CMS considered opening a permanent mission in Kerak but these plans were abandoned owing to the rebellion of 1910 and the outbreak of the First World War. (Letter from Miss C.Nicholson [Kerak] December 9th 1909; Letter from Rev. Sykes [Jerusalem] December 19th 1910, CMS/CM/G3/PP6; Minutes of the Missionary Conference, April 1st 1921 CMS/CM/G3/PP7).

During the First World War the premises of the CMS were taken over by the Ottoman military authorities. CMS missionaries did not return to Salt and Hosn until late 1919. At that time the CMS considered expanding their operations in TransJordan. These plans included proposals for a 40-bed hospital at Salt, and an expansion of missionary work to Amman and Madeba (Letter from Rev. Sykes [Jerusalem] December 4th 1919; Minutes of the Mission Conference April 18th-23rd 1920, CMS/CM/G3/PP6).

However, these plans did not materialise, primarily because of the financial difficulties the CMS experienced in the 1920s and 1930s. Initially, in the period before 1924, these difficulties were a result of high interest charges on loans, and because of the high rents and taxes levied by the TransJordan Government at this time (Minutes of the Sub-Committee of the Missionary Conference November 14th-15th 1922; Letter from MacIntyre [Jerusalem] May 8th-9th 1923, CMS/CM/G3/PP7).

These difficulties prevented the Salt medical mission from doing anything except maintaining their existing commitments, the 26-bed hospital and dispensary in Salt, and itinerant work at Hosn and other villages in that area. In 1926 CMS reviewed its operations in TransJordan, stimulated in part by the financial difficulties, but in part by the realisation that Amman, the capital and administrative centre of TransJordan, was growing quite rapidly compared to Salt, and had a sizeable Christian community. The delegation took the view that Salt was an unhygienic town in need of health care.They also noted that the hospital was understaffed, underequipped, and in heavy use by the local population.

Nevertheless, on the grounds that Salt was in decline the CMS began to scale down their activities there, reducing the bed capacity of the hospital from 26 to 14 but retaining the dispensary. This helped the CMS save up to £1,000 a year, but it also meant that little work was done to improve the facilities at Salt hospital (Report of the Palestine Delegation, November 1926; Minutes of the Standing Committee February 9th 1927, CMS/CM/G3/PP7). At this time the CMS had been receiving an annual subsidy from the TransJordan Government of £240 to ensure that the hospital in Salt stayed open (Annual Report of the Department of Health 1927, CO 831 2/2).

The financial difficulties of the CMS worsened in the 1930s as a consequence of the economic depression in the UK, which affected CMS missions worldwide. The Foreign Sub-Committee of the CMS announced in 1933 that it was cutting its budget by £10,000. The immediate effect of this decision on TransJordan was the threat of closure of Salt hospital, but here the TransJordan Government intervened to raise its annual subsidy to £400. Had the Salt hospital closed, there would have been no hospital facilities in Salt, and it would have left only the government dispensary and epidemic post (Minutes of the Standing Committee May 6th 1932; Minutes of the Foreign Sub-Committee December 5th 1933; Letter from Mrs MacInnes [Salt] February 6th 1934, CMS/CM/G3/PP8).

In spite of their efforts to keep Salt hospital open with a government subsidy, the hospital closed down temporarily in 1934. At this point there was another review of missionary work in TransJordan. The major problem was that Salt hospital had not been well-maintained and was in a state of dilapidation. The situation had deteriorated since the report of the Palestine delegation in 1926, but it was known that the TransJordan Government were reluctant to see the hospital close, but did not have the funds to take it over. Also, the CMS were aware that medical work was an important part of their mission. A compromise formula was then agreed upon. This allowed for the closure of the mission at Jaffa, where medical facilities were well-provided for, and the transfer of funds to Salt, for the construction of a new hospital (Notes by Mrs MacInnes on Medical Work in TransJordan, March 1934, CMS/CM/G3/PP8; Extracts from the Minutes of the Sub-Committee of the Palestine Medical Sub-Conference, February 7th 1935, CMS/ AS 35-49/G2/Pm4).

A new site for Salt hospital was found, and the old hospital with a reduced bed capacity was reopened. The new hospital building was not completed until 1938. The hospital had a bed capacity of 30 in 1943, but towards the end of the Mandate in 1946 structural damage to the hospital, which had weak foundations, threatened it with closure again. This was prevented when £3,000 was spent on repairs (Extracts from a Meeting of the Parent Committee February 28th-March 3rd 1938; Letter from Dr Ethel

and G.Wright [Salt] Spring 1943; Letter from Mrs MacInnes to London January 12th 1946, CMS/AS 35-49/G2/Pm4).

Although the medical mission in Salt was the main focus of CMS work in TransJordan, other parts of the northern districts were also visited by the medical staff. The evangelical and educational work at Hosn also attracted itinerant medical work, and such work was provided at Kefrinji both before the First World War and in the Mandate period. Itinerant work began in the town of Ajlun in 1931, and the following year this became a permanent clinic with a resident doctor (Minutes of the Standing Committee of the Women's Conference November 26th 1923, CMS/CM/G3/PP7; Letter from Canon Webb [Jerusalem] October 31st 1930; Minutes of the Medical Sub-Committee, October 29th 1932, CMS/CM/G3/PP8).

Clinical care in TransJordan undoubtedly improved during the Mandate period, compared to what had existed in the late Ottoman period. However, by the end of the Mandate hospital and clinical facilities were restricted to only three towns in the country, and were inadequate for the needs of the general population. The DOH found that the budget for clinical care was unable to expand to meet these needs, because TransJordan was not generating enough domestic revenue, and because H.M.Treasury were unwilling to increase Grant-in-Aid for health care. The non-government, missionary sector also had financial problems in the Mandate period, and these factors made the expansion of clinical care proceed only very slowly..

4. The Public Health Regime

Under the provisions of public health legislation, the DOH was given powers and duties to ensure that regulations governing a range of public conveniences and activities were monitored. In 1926 regulations were published which affected 'public establishments and dangerous and unhealthy trades', covering cafes, butchers, hairdressers and other trades and commercial operations (Public Health Legislation, enclosed with High Commissioner to Colonial Secretary, December 19th 1929, CO 831 7/2). In addition to these duties, the sanitary inspectors of the DOH were given responsibility for inspecting school buildings and prisons to report on their 'accommodation, sanitation, ventilation, and feeding'; and they were also empowered to enter and inspect private homes, in addition to the activities involving water supplies described in section 2 above (Annual Report 1926:71; Annual Report 1927:79).

Public Sanitation

One area where the DOH was keen to see an improvement was in the control of domestic water supplies. Initially, the registration and inspection of water supplies was begun as part of the anti-malaria campaign, but these activities converged with the

need to monitor domestic water , in order to minimise the risk of water-borne infectious diseases. In some cases, the piping and drainage of urban water supplies was inadequate (though more precise information on this matter has not been discovered). In other cases it was careless human behaviour that had resulted in the contamination of the water supply. In the 1920s, the DOH embarked upon a programme to provide towns and villages with a piped water supply that would be free of contamination, even if it only amounted to a single stand-pipe. Such schemes provided piped water for Amman, Madeba, Tafila and Jerash (Annual Report 1930:215; Annual Report 1933:270).

The town of Salt, however, experienced long term problems with its water supply which adversely affected the health of the population there. The Palestine delegation which inspected Salt hospital in 1926. attributed common ailments such as 'septic throats' to the open sewers and inadequate drainage of the town. In 1935 another visitor pointed out that Salt had no proper paving, that the streets were just earthen pathways (Report of the Palestine Delegation, November 1926, CMS/CM/G3/PP7; Letter from McLean to Bishop [Jerusalem] September 15th 1935, SAC/JEM/12b/2).

The Mandate administration was well aware of the problems in Salt and in 1934 had secured approval from the Colonial Secretary to fund a project to provide the town with a clean water supply and adequate drainage. The topography of Salt was also a factor in its problems, as it was a crowded town on steep hills with many people living in the path of sewage as it flowed downhill. One aim of the improvement scheme was to encourage people to move to higher ground (High Commissioner to Colonial Secretary, June 21st 1938, CO 831 50/5).

However, delays then set in which prevented Salt from acquiring its badly needed improvements. The proposed routes of piped water were held up by rival claims to ownership of land and buildings they would pass under (Administration Report for the Quarter ending June 1939, CO 831 51/7). The Second World War brought more delays because the engine and pumps for the water supply had been ordered from a German firm, but the War meant that the firm had not delivered the goods, and did not look likely to do so (Administration Report for the Quarter ending March 1940, CO 831 55/7). Lack of further documentation makes it difficult to follow through this scheme after 1940.

Other Sanitation Issues

Apart from their duties in monitoring and controlling the water supply, the sanitary inspectors of the DOH were empowered to inspect public buildings such as schools and private homes. The evidence suggests that they were kept busy. For example, in 1928 there were inspections of schools in both the government and non-government

sectors, and 23 were recommended for repairs to improve ventilation or sanitation, or they were recommended for transfer to other buildings because existing conditions were unhygienic. In these operations, the sanitary inspectors of the DOH liaised with officials from the Department of Public Works (ARDOH 1928:17).

Private residencies were also regularly inspected. In 1927 53 homes in Amman were cleansed of vermin. Infected clothing was destroyed, and the buildings fumigated with disinfectant. Other inspections were carried out across the country, and this was a regular feature of the work of sanitary inspectors (ARDOH 1927:8).

With the exception of Amman, scavenging was conducted under licence by private contractors. In Amman it was carried out by the municipality, which owned the only incinerator in TransJordan. In other places waste was burned in open spaces (ARDOH 1930:40; ARDOH 1936:36).

CONCLUSION

During the Mandate period, TransJordan was provided with a broad range of health care services. These ranged from a programme of inoculation against infectious diseases, clinical care in the form of hospitals and dispensaries, and a public health regime which attempted to monitor water supplies, the use of public and private buildings, all in order to create and maintain high standards of hygiene. Compared with the health care facilities that had been available in the late Ottoman period, it is at least evident that the Mandate administration laid down the foundations of a health care infrastructure.

On one level, the increase in the number of hospital beds across TransJordan, in the number of qualified medical practitioners that was available, and in the range of activities affecting public health, all suggests a genuine if limited increase in the quantity of services that was available to the general public. On another level, the larger towns, notably Amman, Salt, Kerak and Irbid, were favoured over other settlements as regards clinical care, while other communities, such as the desert areas, were completely neglected until 1937. But even this increase in the quantity of services did not meet public need, where health problems were exacerbated by the poverty and malnutrition which attended the worst years of the drought. This should not diminish the efforts of those individuals who attempted, year after year, to improve the quality as well as the range of health care. If the DOH failed to increase its budget significantly during the Mandate period, this was due to the fiscal austerity that was rigidly applied by Cox when he became British Resident in 1924. Money was tight, and though some was spent on the campaigns against malaria and other diseases, these were not options the TransJordan Government could accept or reject. They were matters of life and death which required an immediate response.

Thus, rather than developing a coherent health care programme, the DOH muddled through, approaching health problems as they arose. The creation of the desert Mobile Medical Unit was, after all, forced upon the Government, not just through Glubb's constant pleadings, but because the evidence of tuberculosis amongst the tribes was so alarming. But if there were failings in the provision of health care, to some extent they derived from the economic depression which afflicted TransJordan in the 1920s and 1930s because of the drought. Domestic revenue contracted, it did not expand, with the result that the TransJordan Government was starved of funds, and H.M.Treasury was only willing to help when a crisis was identified. Indeed, one Colonial Office secretary was moved to write that 'It is in connection with such services as health and education that "Treasury control" is shown up at its worst' (Minute by Parkinson, July 22nd 1934, CO 831 28/5).

It was a bitter irony that the very conditions, like the failure of the annual harvests, that prevented more expenditure on health,in turn exacerbated the health conditions of the population, and placed even greater demands on the services that did exist.

In the field of health education very little was achieved amongst schoolchildren, while the training of indigenous medical practitioners is not recorded. That TransJordan failed to produce a generation of physicians in a period of 25 years suggests an inattentive approach to this aspect of health care and to education, the subject of the next chapter.

NOTES

1. Rogan (1991:169-172) points out that it was the construction of the Hejaz Railway that brought cholera epidemics to TransJordan in 1902-1903.

2. The failure to meet public health regulations led to the closure of the thermal baths in 1941, see Political Situation Report for November 1941, CO 831 58/2.

3. The DHOs in 1928 were: Amman: Dr. T.Khani; Irbid: Dr. S.Nasrallah & Dr. A. Khartabil; Jerash: Dr.J.Sati: Salt: Dr.S.Zahran; Madeba: Dr.H.Koussous; Kerak: Dr.T.Kawar; Tafila: Dr.Z. Abu es-Suoud; Ma'an: Dr.S.Sati; Aqaba: Dr.R.Taheri. The Medical Officer in charge of the Government Hospital in Amman was Dr.I.Alamuddin; the Chief Bacteriologist was Dr.G.Blofeld (ARDOH 1928:4).

4. For the obituary of Dr. Purnell see The Times, June 28th 1944.

CHAPTER NINE

DEVELOPING AN EDUCATION SECTOR

INTRODUCTION

Towards the end of the Ottoman period there was an attempt by the Empire to provide TransJordan with the elements of a public school system. Progress was slow and the First World War interrupted the process, and brought an end to Ottoman rule. This chapter will examine how far the Mandate administration developed TransJordan's education sector from the low base that was inherited in 1921. Education had to form an important part of the social infrastructure if TransJordan, at some future point, was to 'stand alone' as an independent state. Moreover, there was concern amongst TransJordanians throughout the Mandate period about the country's lack of indigenous, skilled professionals, with many senior positions in the Government occupied by other Arabs, or by British officials. And, as will be shown below, the population had a great enthusiasm for education. After a brief examination of the late Ottoman period, the Government and non-Government sectors will be looked at in turn. Consideration will also be given to higher, vocational, and remedial forms of education.

1. The Late Ottoman Period

The Government Sector

In the late Ottoman period, formal education, meaning a course of study under the supervision of a trained teacher in a classroom or building, was not provided by the state to any extent until the *'Tanzimat'* reforms were implemented after the late 1830s. Before that most schools were privately-funded Islamic elementary schools, the 'Maktab' or 'Kuttab' schools, or at the secondary level, the 'Madrasa' schools. It is not known how many such schools existed in TransJordan before 1840.

The *'Tanzimat'* attempted to broaden the curriculum of Government schools beyond the study of the Qu'ran and of languages (Arabic, presumably also Turkish), by introducing new subjects such as geography, history, mathematics, and hygiene. However, these reforms tended to reach only as far as schools in large towns such as Damascus. With a general shortage of teachers, mosque-based teaching retained its primacy in the rural areas and most of TransJordan (Diab & Wåhlin 1983:108-109).

A further attempt by the Ottoman authorities to modernise education was undertaken by the Committee of Union and Progress after 1908. The Ottoman Elementary Education Law of 1913 aimed to finance education through a locally levied tax on immovable property, the 'Municipal Education Rate', but the outbreak of the War and

the eventual collapse of the Ottoman system prevented this reform becoming effective in TransJordan. Nevertheless, this element of Ottoman education law was incorporated into the laws of TransJordan under the Mandate when the 'Municipal Education Rate' was revived as a local education tax in 1937 (Annual Report 1938:362).

Because data on Government schools during the late Ottoman period is poor, it can only be assumed that there were schools in some villages financed by local people. It is known that in Salt there were 3 elementary state-run schools by the 1870s. These had 3 teachers and 180 pupils. Mention is also made of a school in the Belqa district which had 1 religious teacher and 20 boys (Shahin Makarius [1882] in Diab & Wåhlin 1983:123-124).

The Non-Government Sector

Prior to the Mandate period, the non-government education sector was largely Christian based and provided either by the established eastern churches, or by foreign missionaries. It is likely that such communities were weakened from time to time by drought and local conflicts, and lost their schools. Nevertheless, the little information that is available does suggest that Christian schools were in continuous existence in TransJordan from the 1850s onwards.

Salt was particularly favoured. The Greek Orthodox church opened a school there in 1850 for 60 male pupils, and the Latin Patriarchate of Jerusalem also opened two schools one in 1870 for 60 boys and one for 20 girls in 1871. Of the foreign missions, the England-based Church Missionary Society (CMS) was most active. In 1867 it opened a school in Salt for 95 boys and girls. Thus, by the 1870s, Salt had seven schools with a total of 415 pupils. The estimated population of Salt at that time was 7,700 so that a considerable proportion of its children was getting some formal education (Diab & Wåhlin 1983:112, Shahin Makarius [1882] in Diab & Wåhlin 1983:124). The CMS also set up a school in the village of Hosn.

Prior to the end of the First World War, two reports confirm the existence of schools in the Kerak district. Alois Musil, writing from Vienna in 1916, referred to an attempt to set up a school in the 'Sanjak of Kerak' (Alois Musil [Vienna], 'The Present State of the Turkish-Arabian Provinces', March 16th 1916, FO 882 14) [**1**].

In the other report, Fathers Jaussen and Ravignac ('Notes on the Country Beyond the Jordan' [1917] FO 882 14) state that there were four Christian schools in Kerak, two of which were run by the Greek Orthodox, and one each by the Latin Church and an English Protestant mission. In sum, while there is no precise record of the provision of education in TransJordan before 1921, a limited amount of education was being

provided in a few places by a few Government schools. But most of the formal schooling was provided privately by the eastern churches or by foreign missionaries.

2. The Mandate Period, 1921-1946

a) 1921-1924

As a consequence of the First World War, and in the absence of an effective local authority from 1918 to 1921, the Government school sector appears to have all but collapsed.

High Commissioner Samuel reported in 1920 that Irbid had 'voted for 14 schools' (High Commissioner to Foreign Secretary, November 22nd 1920, FO 371 5290). It is not clear what this vote meant in practical terms, because the 'local self-government' in Irbid had no effective authority, and there is no record of 14 schools being established there following the vote.

In early 1921, it was reported that in the Belqa district, 'Government education...is almost non-existent. The Government schools that do exist are poorly staffed but are free. The best schools are those of the Greek Orthodox, Greek Catholic, Latin and Protestant communities' (Report on the Belka District, Enclosure No 2, High Commissioner to Foreign Secretary, January 7th 1921, FO 371 6371).

Non-Government schools had not fared so badly as a consequence of the War. For example, the CMS withdrew their missionaries from TransJordan for the duration of the War, but had returned to open their mission schools and hospitals by late 1919. Nevertheless, in 1923, there is some evidence that non-Government schools run by Christians and missionaries were in conflict with the TransJordan Government. The CMS believed that the Government was trying to close down all the Christian schools to create 'a closed area like Mecca'. In February of 1923, the Government had singled out the CMS school at Hosn, where it 'had asked for dismissal of all present teaching staff, adoption of Govt syllabus, the use of Govt school books etc'. It was also argued at this time that these proposals were coming from Amman, described as a hotbed of 'Muslim evangelism' (Minutes of the Standing Committee of the Mission Conference, February 7th 1923; Rev. Cash [Jerusalem] to London, February 8th 1923, CMS/CM/G3/PP7).

In fact, in 1923 the Government did succeed in closing down the CMS schools in TransJordan,as well as a Greek Orthodox school in Kerak, though these were temporary measures. The Government also rejected proposals by the US-based Christian and Missionary Alliance [CMA] to open girls' schools in Madeba, Kerak, and the village of Hmud, north-east of Kerak. The Madeba decision was described by Philby as 'a stupid decision prompted solely by bigotry' (Reports of the Chief British

Representative to the High Commissioner, October 1923, November 1923, FO 371 8999).

The precise reasons for the Government's actions against these mission schools is unclear. There could have been personality clashes, or an expression of resentment against those Christian missionaries who entered TransJordan not just to practise medicine or education, but who also sought to convert local people to Christianity. For example, in Madeba, Philby reported that an American missionary, Mr Smallie, had his school closed down after 'injudicious preaching at Badawin audiences' (Report by the Chief British Representative to the High Commissioner, October 1923, FO 371 8999) **[2]**. In spite of these difficulties, the non-Government school sector survived, and in the new regime under Cox from 1924, they were able to expand on their operations.

b) Education, 1924-1946: The Policy Background

The Colonial Office exerted more comprehensive authority over TransJordan from 1924 onwards, and in doing so, acquired overall responsibility for the whole of policy making in TransJordan, with the exception of religious (Islamic) affairs. With regard to education, the Covenant of the League of Nations made no specific recommendations on what the Mandatory powers had to provide. However, the text of the Mandate was more explicit. Article 15 stated that,

> 'The right of each community to maintain its own schools for the education of its members in its own language, while conforming to such educational requirements of a general nature as the Administration may impose, shall not be impaired or denied'. (Article 15 of the Mandate for Palestine & TransJordan, CMD 1785 [1922]).

This article would not only allow the existing system of private education to continue, but left open the legal means whereby the Government could organize the institutional apparatus of the education sector, stipulate the conditions for the hiring of teachers, and organize the curriculum. The Mandate set an agenda that the Government was expected to adhere to, but yet was not compelled so to do. That is, the Mandate administration had to account for the provision of education in the annual report to the PMC, but however critical they might be of education provision in TransJordan, the PMC did not have the power to enforce changes to their liking.

c) The Government Sector, 1924-1946

General Provision of Schooling

The annual reports to the PMC did not begin to make references to education in TransJordan until 1925. Furthermore, until the appearance of the 1935 Report, the

annual entry was but a perfunctory list of schools and pupil numbers, with occasional remarks on the problems of the shortage of teaching staff. These reports show that for most of the years between 1925 and 1934 there was a steady increase in the number of Government-run elementary schools and pupils of both sexes but that post-elementary schooling was only available in the four largest towns (see **Table 19).**

Table 19: Government and Non-Government Schools, Pupils and Teachers

School Year	Govt Schools	Govt Pupils	Govt Teachers	Non-Govt Schools	Non-Govt Pupils	Non-Govt Teachers	TOTAL ALL PUPILS
1928-29	57	4,437	n/a	100	3,531	n/a	7,968
1931-32	61	5,511	n/a	93	3,270	n/a	8,718
1933-34	66	5,560	150	132	5,222	201	10,782
1934-35	65	5,917	153	116	5,309	200	11,226
1935-36	68	5,842	154	118	5,612	214	11,.454
1936-37	68	6,515	154	102	4,710	172	11,225
1937-38	70	7,408	163	102	5,526	194	12,934
1938-39	74	8,152	181	117	5,342	219	13,854
1939-40	74	9,306	182	109	5,298	230	14,604
1940-41	74	10,150	184	116	6,605	218	16,755
1941-42	73	10,364	184	92	4,847	175	15,211
1942-43	74	9,852	186	90	5,256	195	15,108
1943-44	69	9,607	188	86	5,594	173	15,201

(Source:Konikoff 1946:26)

For most of TransJordan, the education system provided for up to seven years of elementary schooling across the age-range from 6 to 13. The elementary stage concluded with an examination which was supervised by the schools themselves until 1944-1945, whereupon it became a public examination administered by the Ministry of Education.

The secondary level could not be entered without an examination pass. It was supposed to provide a four-year course, but in reality only the school at Salt ran a full four-year course. Of the other three secondary schools in TransJordan during the Mandate period, the schools at Irbid and Amman ran three-year courses, and the school at Kerak a two-year course (Matthews & Akrawi 1949:304-305).

For most village children, education amounted to little more than four years of elementary education. To receive even this they might have to walk a mile or more to the next village. Government schools in rural areas were also liable to be closed during periods of drought, as happened in 1928, while it was common for fathers to take their sons out of school if there was work to be done in the fields. This often left schools with more pupils in the lower-age classes than a balance across the age-range,

with the result that there was a high drop-out rate (Annual Report 1928:107; Annual Report 1931:185).

By the time of the 1935 report, it was being stated that many boys who began elementary school failed to see it through to the end (Annual Report 1936:360-361). This tendency for boys to drop out of school after the second or third years is seen in the figures for school attendances in village schools in 1936:

Table 20: Pupils in Village Classes, 1936

Preparatory Classes	916
First class	553
Second Class	463
Third Class	289

From 1935 onwards, more detailed reports on the education sector were filed, throwing light on the schools system. Thus, of the 60 Government schools, only 10 provided a full seven-year programme, and all of these were in the urban areas. As **Table 21** indicates, the Belqa district was most favoured, because it included the more developed towns of Salt and Amman. The northern districts also had more schools than the southern districts, a reflection of the extent and durability of the sedentarized population there:

Table 21: Distribution of Town Schools, 1937

Liwa	Boys	Girls	Total
Belqa	5	4	9
Ajlun	3	2	5
Kerak	2	2	4
Ma'an	1	1	2

(Source: Annual Report 1937:352)

Table 22 shows that there were more schools in the rural areas, but underlines the extent to which it was the more heavily populated districts in the north which benefited most:

Table 22: Distribution of Village Schools 1937

Liwa	Qada [sub-district]	No of Schools
Belqa	Amman	6
Ajlun	Irbid	20
Ajlun	Jerash	2
Ajlun	Jebel Ajlun	5
Kerak	Kerak	5
Kerak	Tafila	2
Ma'an	Ma'an	3
	Total	43

(Source: Annual Report 1937:353)

A new development in 1933 was schooling for the bedouin. Schools in the desert forts at Azraq and Mudawarra were set up to educate adult males from the Desert Patrol, as well as the children of nomads (Annual Report 1935:316). Another opened at Jafar in 1936, but by 1937 the desert schools had only a total of 40 pupils.

Reforms to the Government School Sector

Various attempts were made to reform education from the 1920s onwards. When the Assistant Director of Education in Palestine visited TransJordan in 1927 he reported that the standard of education in TransJordan was just satisfactory but still low (Situation Report, December 15th 1927, CO 831 1/1). Following his visit, a panel of 17 teachers was appointed to develop an improved syllabus, which was introduced in 1929. The real problem in TransJordan was the lack of suitably qualified teaching staff, most of whom could find better paid jobs elsewhere (Situation Report April 1st-June 30th 1929; Situation Report July 1st-September 30th 1929, CO 831 5/9).

In spite of the introduction of a new syllabus, the development of Government schooling did not proceed smoothly in the late 1920s and early 1930s. In 1931, the O'Donnell Commission was critical of the practice whereby secondary school boys had to be sent to agricultural school in Palestine. They felt the scheme should be restricted to those boys who intended to return to the family farm after graduation. More serious still, they recommended that the annual education budget be reduced by £9,500, arguing that a ceiling of £15,000 pa should prove adequate (Recommendations of the O'Donnell Commission [1931] CO 831 16/2).

As mentioned earlier, the 1913 Ottoman law on education was amended by the TransJordan Government in 1937 to restore the 'Municipal Education Rate', payable

on immovable property. This was needed to fund extra classes. The implementation of the amended law, however, was confined to the municipal areas of Salt and Amman, which were already the areas with the best education. A rate of 2% on the rental value of buildings was levied, and yielded about £1,404 a year. However, only a small expansion in provision followed, totalling no more than 4 extra classes, and seven extra teachers in 1937 (Annual Report 1937:352).

1938 saw the first publication of figures on the number of pupils accepted and rejected by the Government sector (see **Table 23**). These figures reveal that as many pupils were turned away as were accepted. Even if one accepts that many parents, particularly in the rural areas wanted their children to work from the age of 13 onwards, there was, nevertheless, a strong desire, not being met by the state school system, for children to acquire basic skills in reading, writing and arithmetic and whatever else was on offer.

Table 23: Government Schools:Pupils Accepted and Rejected

1937-38

	Town Schools, Boys	Town Schools, Girls	Village Schools, Boys	Village Schools, Girls	TOTAL
Applied	1,917	681	2,520	26	5,144
Accepted	737	400	1,177	23	2,337
Refused or Deferred	1,180	281	1,343	3	2,807

1938-39

	Town Schools, Boys	Town Schools, Girls	Village Schools, Boys	Village Schools, Girls	TOTAL
Applied	2,137	526	2,111	26	4,800
Accepted	1,282	373	1,000	26	2,682
Refused or Deferred	855	153	1,111	-	2.119

(Source: Annual Report 1938:362).

It is hardly surprising in these circumstances, that the Emir Abdullah should have expressed his disappointment in 1937, after 16 years of Mandatory rule, with TransJordan's education provision. He was widely acknowledged as a literate man with a love of poetry, and when interviewed for The Spectator, he talked about religious ethics and education. When speaking on education, his interviewer, Rom Landau, detected 'a note of complaint in his voice when he implied that more could be done in that direction than is permitted by his limited means' (Landau 1937:353).

Although the onset of the Second World War was a boost to some areas of TransJordan's economy, the education sector continued to make but modest progress.

Change was not considered urgent. The Middle East Supply Centre, set up in Cairo in 1941, had no remit to oversee developments in education, but it did convene 'scientific advisory missions' which visited Middle East countries and reported on their education sectors. In most cases, the view was that indigenous systems of education were preferred over the importation of 'exotic systems of education' (Introduction by Dr.K.A.Murray, in Allen 1946:iv).

Subsequently, the most detailed report on TransJordan's schools was provided by Matthews and Akrawi in 1949. They reported on the traditional nature of the curriculum in elementary schools with much emphasis on Quranic teaching. In the rural schools there was a greater emphasis on agricultural education, and as a result, there were fewer lessons in Arabic, English and Geography. The education of girls also was perfunctory, with domestic science, child care and nursing instruction beginning when girls were aged 12-13 (Matthews & Akrawi 1949:310-311). Even these limited curricula were not available in all schools. Clearly they were not a sound basis for a better trained population.

Government Education: Administration and Finance

With such a limited Government school sector, the Department of Education [DOE] was one of the smallest departments in the TransJordan Government. Its staff never exceeded 10 before 1946, excluding teachers in the schools (Annual Report 1935:316). In 1935 there were two school inspectors, increased to three in 1937 (Matthews & Akrawi 1949:299-300).

Growth in the education system was limited by two interdependent problems. Firstly, education generated almost no income of its own and was thus entirely dependent upon funding from domestic revenue. Secondly, and as has been shown above, the economy was for many years in a chronic recession. This limited the amount of money that could be paid to teachers, and a shortage of teachers was one of TransJordan's greatest problems in this period. Salaries for teachers were low, and uncompetitive with other Middle Eastern countries, as Matthews & Akrawi (1949:301) observed: 'promotions of teachers have lately been so rare that out of thirteen teachers with BA degrees who were teaching in the secondary schools, only four remained. The other nine left for more lucrative jobs'.

As a consequence of the lack of good teachers, and the relatively static level of school provision, the level of literacy in the population remained low, though there are no accurate statistics to support this. While Matthews & Akrawi (1949:544) argued that TransJordan had done better than Iraq, its literacy rate was not as high as Palestine, Syria, Lebanon or Egypt.

In sum, while there is little doubt that the Government education sector in the Mandate period expanded beyond anything that had been achieved by the Ottoman Empire before the First World War, it is also the case that insufficient resources were put in to create a proper school system. The O'Donnell Commission cut the education budget in spite of popular demand for schooling, and did so at a time when, as a consequence of the drought, domestic revenue could not make up the difference. As a result of the deficiencies in the Government sector, many children got an insufficient education, while others turned to the non-Government sector, whose activities will now be examined.

d) Education in the Non-Government Sector

On the very rudimentary evidence that is available, it appears that there was a slow expansion of the non-Government school sector in TransJordan throughout the Mandate period, though their share of the student population was smaller than the Government sector (**Table 19**). The bulk of the non-Government sector was provided by the eastern churches, and by foreign-based missionaries, and, unlike the Government sector, these were fee-paying schools. Some children were sent to private schools in other countries, as the data for 1936 in **Table 24** indicates:

TABLE 24: Non-Government Schools Outside TransJordan (1936)

LOCATION & NAME OF SCHOOL	NO. OF PUPILS FROM TRANSJORDAN
Terra Santa, Jerusalem	28
St George's School, Jerusalem	9
Friend's School Ramallah	8
Rawdat al Maaraf, Jerusalem	3
Bishop Gobat School, Jerusalem	2

Source: Annual Report 1936:362

The Church Missionary Society Schools

The CMS began operating medical and education missions in TransJordan from the late 19th century onwards. They were based in Salt, where they ran two schools, for boys and girls. They also ran a school in Hosn. As mentioned above, the missionaries returned to TransJordan after the War, in 1919, but had some difficulties with the TransJordan Government in 1923. When the new regime under Cox was established in 1924, the mission schools were allowed to function free of Government interference. The CMS then began to consider expanding their education work to Amman.

With Amman growing at the expense of Salt throughout the 1920s, the CMS considered the long-term future of their mission at Salt. While Salt remained their principal base in TransJordan they decided to expand their operations to include

Amman.In 1926 they opened the Amman Girls School [AGS] 'for better class girls'. (Letter from Miss K.M.Lestor [Amman], July 6th 1929, CMS/CM/G3/PP7).

In 1929, the CMS began to experience long-term financial difficulties, which affected their missions world-wide. They reviewed their operations in TransJordan and decided that to economize they should concentrate their operations on the Belqa district, leaving other areas of the country to other missions, such as the US-based CMA. A new building for the Salt Boys School was opened in 1929, but though AGS continued to be a success, the school there was also in financial difficulties and was kept open mainly through voluntary contributions from the congregation (Minutes of the Conference November 27th-28th 1929; Minutes of the Conference April 27th-May 1st 1930; Letter from Canon Webb October 31st 1930, CMS/CM/G3/PP8).

Financial shortages forced the CMS to consider closing down the Salt Boys School for two years beginning in August 1932. In fact the school was kept open through voluntary contributions from the Salt congregation. The Salt Girls School also experienced difficulties. Financial assistance from the TransJordan Government was not forthcoming as it was known that Cox favoured vocational education to the more general education provided by CMS schools (Letter from Bishop January 2nd 1933; Minutes of Standing Committee April 6th 1932; Minutes of Standing Committee May 6th 1932; Minutes of Education Committee October 29th 1932; Minutes of Conference February 2nd 1933, CMS/CM/G3/PP8).

As a consequence of their continuing financial difficulties, CMS reconsidered their operations in TransJordan again in 1934. They were loathe to cut back on their evangelical work, and did not want to leave the field open to the Roman Catholics. More pertinent still was the fact that there was a great popular enthusiasm for education that was not being fulfilled from existing schools in either the Government or non-Government sector:

> 'The opportunities that exist at this juncture for educational work in T.J. should not be disregarded in any discussion of policy as they can hardly be overestimated. The people of T.J. are determined to get education, the Government are unable to cope with the demand adequately, and have to look to Palestine to supply trained teachers' ('Anglican Missionary Policy in TransJordan', Memorandum by Mrs R.MacInnes to Bishop in Jerusalem, March 3rd 1934, CMS/CM/G3/PP8).

The financial situation of the CMS eased somewhat after 1934 and the success of AGS led the Amman mission to apply for a loan from the parent organisation in London to build a new school. After some debate on the merits of the case, London agreed to fund the construction of a new building for AGS, at a cost of £1,650 (Rev. Hooper

[Jerusalem] to Mrs R.MacInnes April 17th 1935; Hooper to MacInnes June 3rd 1935; Hooper to MacInnes June 24th 1935, CMS/AS 35-49/G2/Pg1). The new school opened in 1938 (Extracts from Minutes of Palestine Committee, October 19th 1938, CMS/AS 35-49/G2/Pe1).

The AGS was a success because it provided sorely needed education for girls, and because the CMS had won the trust of both the Christian and Muslim communities. The remarkable feature of all the CMS schools, is that they survived on poor and haphazard income, with no recorded financial help from the TransJordan Government.

e) Higher Education

There were no facilities in TransJordan for education beyond the secondary level during the Mandate period. As indicated in the section on vocational training below, students who sought advanced education were obliged to travel to other countries, principally Palestine and Syria. In most of the cases of external education, the courses of instruction were in teacher training or related subjects, or in agriculture. The fees were paid by the TransJordan Government on condition that students return to TransJordan and work in the country after graduation. It is not known if students were sent at their families expense to foreign universities.

It is known that at least one student, a Muslim girl, who graduated from AGS, went from Amman to Jerusalem, and from there to Lady Margaret Hall, Oxford, where she read modern history. Details are lacking, but it seems that CMS might have given the student financial help (Letter from Miss Warburton [Amman] to London, June 15th 1935, CMS/AS 35-49/G2/Pg1). The Economic Committee in 1934 expressed the anxiety of many people in TransJordan that the education sector was not producing students who could move into senior grades in the Government service. This view first emerged in 1924 with the re-organisation of Government, when Syrian nationalists in the Government were replaced by British officials, often on a two-year secondment from the Palestine Government. As Cox put it:

> 'It is a cause of complaint that there are a number of officials in Government service who are not sons of the country whilst except for Heads of Department the majority of officials are without academic qualifications' (British Resident to High Commissioner, April 8th 1936, CO 831 39/16).

In response to this concern, a proposal was made to send students to universities in the UK. As a result, a modest scheme, approved by the High Commissioner and the Colonial Office, allocated £700 to send eight students over a period of 16 years, initially, to study law. In fact, none of the students who were sent to the UK actually

read this subject (British Resident to High Commissioner, April 8th 1936, CO 831 39/16).

The first student to take advantage of the scheme, Najib Alamedin, was a schools inspector who was sent to the University College of the South-West at Exeter in 1937 to study English Language and Institutions, and teaching methods. Three other students followed , one to read Veterinary Science at the Royal (Dick) Veterinary College, Edinburgh in 1938, another went to the University College of the South-West at Exeter to study English language and literature in 1939, while the third went to the Institute of Education in London to study education (Sullivan [British Council] to Kirkbride, June 11th 1937; Sullivan to Kirkbride June 30th 1937, CO 831 39/16. British Council to British Resident, November 7th 1939, CO 732 84/12). The onset of War in 1939 brought the scheme to an abrupt halt. In all, only five students attended a university course in the UK (Matthews & Akrawi 1949:305). Other students are known to have attended the American University in Beirut, and the American University in Cairo.

f) Vocational Training

Vocational training inside and outside TransJordan was provided at several levels on a limited scale. For the general population there was the Arts and Crafts School in Amman, while for military personnel only, there were opportunities to learn mechanical trades of use to the Arab Legion as well as civilian life. It was also possible for prison inmates to learn a trade.

The Arts and Crafts School was a small institution set up in 1925 which provided courses free of charge in practical skills at the secondary school level. Carpentry, ironwork, book-binding, bootmaking, weaving and cane-chair making were taught (Annual Report 1932:221). The school also had boarding places for students not domiciled in Amman. Initially, the courses ran for one year, but by 1935 they had been extended to run from three to four years. The number of pupils who studied at the school was small, in 1938, 61 pupils attended the school.

Graduates of the school, it was reported, found employment using their skills, and the quality of the work done in the school was considered to be high, and many of its products were sold in local markets (Annual Report 1934:253). Tripe (SAC/1942:24) observed that there were two functions in the school, 'Cabinet making and engineering. Modern furniture of a high standard is turned out in large quantities and the boys on the other side learn, in the most thorough manner, how to construct and work internal combustion engines'. However, in spite of popular enthusiasm, and the practical and commercial potential of vocational education, the Arts and Crafts School in Amman was the only facility of its kind in TransJordan throughout the Mandate period.

Teacher Training and Regional Schooling

One of TransJordan's most urgent requirements was for trained teaching staff. As there was no provision for teacher training, candidates had to be sent to schools in Palestine and Syria, but the Government offered few assisted places. As a result, the overall provision of teacher training remained poor and did nothing to alleviate the chronic shortage of teachers the annual reports continually mentioned. Until 1938, only two assisted places for women were provided at the Women's Elementary Training College in Jerusalem, and five places for boys at the American University of Beirut. Students on these courses were 'under contract to serve as teachers in Government schools on qualification' (Annual Report 1928:107).

An effort was made in the early 1930s to broaden the scope both for boys and existing teachers. Arrangements were made with the Agricultural School at Talabaya in in agriculture, and at the Kadoorie Agricultural School in Tulkarm in Palestine to train a total of 8 teachers on short courses in agriculture, and for boys to undergo similar, but longer courses (Annual Report 1933:265).

Opportunities for teacher training were also increased in Palestine in the 1930s. Students went to the Government Arab College in Jerusalem, and the English Girls College in Jerusalem (Annual Report 1936:361).

For unexplained reasons, the courses of instruction at Talabaya were not mentioned after 1934-35, and attendance at Kadoorie ceased after 1937 owing to the troubles in Palestine (Annual Report 1938:365).

Training for Military Personnel

The Arab Legion required men of all ranks to learn a range of skills both for local policing and national defence. These ranged from familiarity with the law, to practical skills involving the use of machinery, firearms, motor vehicles, and horses. The Legion provided much of the training, but some men were sent for training in the UK, Egypt, and Palestine.

In 1932, a Police School was set up to instruct officers and men in the law and took in 41 officers and men in its first years (Annual Report 1932:212-213). The following year an unspecified number of men were sent to the UK for Senior Police Officer Courses at Scotland Yard, and at locations elsewhere in England and Wales. Other officers and cadets attended the Palestine Police School (Annual Report 1933:282).

From 1935 the TJFF provided training in a range of skills and subjects at its Zarka base. Other men from the Legion were sent in small numbers to Palestine and Egypt to

learn skills in motor mechanics, firearms, and wireless telegraphy (Annual Report 1935:304-305).

There was also training for prisoners in TransJordan's central prison at Amman, but details are lacking. It was reported in 1938 that 135 prisoners were undergoing courses of instruction in practical trades, such as stone cutting and trimming, washing and ironing, telephone operation, cooking, carpet and mat making and so forth (Annual Report 1938:351).

CONCLUSION

TransJordan's education sector expanded in the Mandate period at a faster rate than in the late Ottoman period. As in Ottoman times, education was provided by the Government, and by non-Governmental, primarily religious, bodies. There was a thirst for education in TransJordan, and it made no difference to many Muslim families if their children were educated in Christian schools. Undoubtedly, there are individual examples of children who progressed through school to higher education, either in the Middle East, or in the UK. However, the general provision of education for most people was very limited, and was badly handicapped by the poor performance of TransJordan's economy. This deprived the TransJordan Government of the revenue that it would have needed for long-term investment in the number and range of schools required for universal education to levels that made full use of the student's abilities. The evidence also suggests that the mission schools had their own financial troubles, and were unable to expand as they would have liked.

Some areas, such as the Belqa, benefited from school provision from elementary though to secondary school, while other areas, and the countryside in general, could barely provide elementary education. Demand for school places far outstripped supply, but even in the relatively more prosperous period which followed the end of the drought cycle in 1936, education was not given a higher priority by the Government.

At the institutional level, there was a Government department for education, and the rudiments of a system for the inspection of schools, but most forms of advanced training were dependent upon facilities in Palestine and Syria.

As with the provision of health services, the failure to develop education resulted in a weak social infrastructure. TransJordan's richest resource has always been in its population, rather than in nature, and it was not fully exploited. There is no evidence whatsoever that at any time in the Mandate period, the British Resident or his staff, applied to the Treasury for a significant increase in education expenditure. This

slowed economic progress and gave Palestinian refugees an advantage, when they arrived in TransJordan as refugees in 1948.

NOTES

1. It is possible that the school building referred to was in the village of Smakia, north-east of Kerak. There was certainly a designated school building in the village, and in 1928 it was closed down by Public Health inspectors and the school moved to another building; see Annual Report of the Department of Health, TransJordan, 1928.

2. An evangelist operating in Oman encountered severe difficulties with Muslim communities, often because the practice of Christian worship was alien to them, and because of his attempt to sell Bibles, a controversial act because it competed with the Quran for influence over people. Of this practice, the missionary stated 'It is better to make a friend than a sale'. On the problematic nature of Christian evangelism in a Muslim country, he noted 'We have come not to destroy systems and establish others, but to change character. And this is a baffling task. Who is sufficient?', (van Peursem 1921:271).

PART THREE:

THE BRITISH ROLE IN THE DEVELOPMENT OF AN INFRASTRUCTURE IN TRANSJORDAN DURING THE MANDATE PERIOD

CHAPTER TEN

THE BRITISH ROLE IN THE DEVELOPMENT OF AN INFRASTRUCTURE IN TRANSJORDAN IN THE MANDATE PERIOD, AN ASSESSMENT

This chapter will assess the role played by Britain in the development of TransJordan during the Mandate period, and the character of the infrastructure created. It will examine the following: 1) How far Britain fulfilled its obligations to the League of Nations as the Mandatory power for TransJordan, and how well TransJordan satisfied Britain's imperial interests; and 2) what the experience of the Mandate meant to TransJordan.

1. The League of Nations Mandate and British Interests in TransJordan

When Britain acquired responsibility for the Mandate in TransJordan, its obligations to the League of Nations were set out in two documents, the Covenant, and the text of the Mandate. Articles 22 and 23 of the Covenant justified the creation of the Mandated territories on the grounds that the successor states to the defeated powers of the First World War were not yet ready to 'stand by themselves under the strenuous conditions of the modern world'. Before they could practice self-determination as independent states, the Mandated territories needed the tutelage of developed states -such as Britain- who would promote the welfare and resources of their charges, making efforts to eradicate infectious diseases, put an end to child labour and slavery, and control the traffic in narcotics and armaments (Articles 22 & 23 of the Covenant, in Northedge 1988:325-326).

The text of the Mandate incorporated the provisions of the Covenant, but both texts were vague when it came to matters of economic and social development, neither text indicated if the Mandated territories were to be democratic, and no indication was given as to when the Mandate would end. The Covenant required Mandated territories to show that they could 'stand alone' before granting them the status of an independent state. This ability to stand alone can be seen to have presupposed some infrastructural development of the kind examined in this thesis, even if the term itself was not used at the time.

Some idea of the criteria that were to be used when terminating a Mandate was provided by the case of Iraq, whose Mandate was terminated in 1932. To achieve the status of independence and qualify for membership of the League, Iraq had to show *de facto* evidence that it could 'stand alone', and give *de jure* guarantees that it would adhere to the principles of international law (Foster 1935:281-282). The *de facto* conditions required Iraq to show that

i) it had stable government;

ii) that the Government could maintain the territorial integrity of the state and its political independence;

iii) that the Government could maintain domestic peace;

iv) that the state was financially stable; and

v) that a system of justice was available for all.

In addition to this evidence, Iraq had to give *de jure* guarantees that it would commit itself to

i) the protection of the rights, language and religion of minorities;

ii) the protection of the rights of capitulations and foreign nationals;

iii) the protection of freedom of conscience;

iv) the inheritance of financial obligations; and

v) the inheritance of international treaties and conventions.

When the Mandate was terminated in 1946, TransJordan could have met three of the *de facto* conditions that were applied to Iraq. The TransJordan Government could have shown that it was stable, and that it was capable of maintaining domestic peace. An equitable system of justice was available throughout the country, but without a more detailed examination of the judicial system, this judgement is superficial. However, with regard to maintaining the integrity of the state and its political independence, it was clear that TransJordan's political independence had been circumscribed by its inclusion in the British imperial system. This had made it difficult, during the Mandate period, for TransJordanians to articulate an anti-British, anti-imperialist, pro-independence agenda before 1946. Although there was some public opposition to the UK-TransJordan Agreement of 1928, for the rest of the Mandate, at least until 1941, the political atmosphere was subdued [**1**].

Also, while the TransJordan Government could have shown a reasonable degree of financial stability, it could not have shown that independent financial decision making was entirely possible. That TransJordan's financial system was stable was due in part to the sluggish economy, which only began to improve in the 1940s, and due in part to the integration of TransJordan into the Sterling Exchange Area. The TransJordan Government had no means of making long term decisions of an economic or fiscal nature without the approval of the Colonial Secretary and H.M.Treasury.

TransJordan's financial stability, therefore, was artificial because of the controlling influence Britain had over TransJordan's currency and banking regulations. An independent TransJordan could not be in a position to show that it would be able to manage a stable financial system upon reaching independence.

For these reasons, TransJordan would have been able to give the League the *de jure* guarantees in every respect except the inheritance of financial obligations. In fact, its financial obligations to Britain were so intricate as to preclude much independent decision making on economic affairs, and British influence over TransJordan's economy remained strong after independence in 1946 (Kingston 1990:295).

The Termination of the Mandate

Although TransJordan's Mandate was terminated in 1946, Abdullah had tried to achieve independence in 1937. He requested permission from the Colonial Office to apply for membership to the League, but it was rejected. An Assistant Secretary in the Colonial Office, Downie, was most indignant at this importunate behaviour, and recommended that the Colonial Office submit a formal dispatch 'to administer a "rap on the knuckles" to the Amir' and make it clear that such a decision was only to be taken by His Majesty's Government (Minute by Downie, July 2nd 1937, CO 831 44/13).

The Colonial Office began to take a different attitude after the outbreak of the Second World War. When, in 1941, TransJordan's independence was first mooted, this was for political reasons, and a reflection of events that had been taking place in Syria. The French Mandate in Syria in 1940 had been passed to Vichy control, and with the pro-German coup in Iraq there was a fear that this pro-German axis would deepen the War in the Middle East. Thus, in 1941, Britain and the Free French Forces issued a joint declaration which 'promised Syria and Lebanon unconditional independence and the right to vote if they wished' (Petran 1972:77).

The Colonial Office view was that having given such a commitment to Syria, it would be hard for Britain not to extend it to TransJordan:

> 'Few Arabs can be deceived into thinking that the joint Free French and British declarations of Syrian independence was issued last Sunday because the people of Syria have just this moment reached the stage at which they are able to "stand by themselves under the strenuous conditions of the modern world"...It was obviously issued to enlist the support of the Syrians for the Allied cause against the Germans. If we are prepared to put an end to the Mandate in Syria to buy the support of Arabs who might otherwise be our enemies, are there any good grounds

on which we can continue to retain the Mandate for TransJordan, where the ruler and his people have for twenty years been our most consistent Arab friends?' (Minute by J.S.Bennett, June 13th 1941, CO 831 59).

This discussion did not lead immediately to the negotiations which culminated in TransJordan's independence in 1946. The delay was caused by Britain's anxieties with regard to Abdullah's ambition to extend his authority to Palestine at a time when the Mandate there was being reviewed, and the possibility that Abdullah's ambition would provoke Ibn Saud into renewing his outstanding claim to sovereignty over the southern district of Ma'an. Britain also wanted to maintain its strategic advantages in the Middle East, and was keen to ensure the RAF free access to its bases in TransJordan after independence. Indeed, such provisions were a major part of the new UK-TransJordan Treaty which conferred independence on TransJordan in March 1946 (Wilson 1987:147-148).

The Treaty was signed after Britain had gone through the formality of proposing TransJordan's independence at the United Nations in February 1946. However, the degree of control that Britain retained over TransJordan, in part through the new Treaty, and in part through its considerable financial interests in the country, was responsible for the USA refusing to recognize the new state (Dann 1976:220-221).

That TransJordan was brought to independence in this way is indicative of the extent to which, on balance, the Mandate met Britain's imperial interest more than the League's obligations. Britain's imperial interest was served in TransJordan in two ways. One was the practical advantage that Britain had through its unhindered access to TransJordan, as a vital land and air corridor between the Suez Canal and the Persian Gulf. TransJordan was used as a base to mount the successful end to the coup in Iraq in 1941, and throughout the Second World War British troops were freely deployed in TransJordan. Secondly, the imperial interest was served by the relative political stability in TransJordan throughout the Mandate period. This left British officials free to conduct the mundane affairs of administration and creating the infrastructure of a modern state without being loaded down by the kind of security problems and political difficulties which attended British jurisdiction in Egypt, Iraq and Palestine in this period.

2. The Impact of the Mandate on TransJordan

The Reordering of Space and its Consequences

Throughout the Mandate period, Britain's position in TransJordan was unassailable. It was a position of immense power which was exercised through the Emir Abdullah, through ex-officio status in the TransJordan Government, and through the command of

the armed forces. The Mandate administration was not immune to, or ignorant of, local demands, but it was otherwise free to shape developments in TransJordan at every level.

The evidence advanced in this thesis has shown that Britain played a dominant role in developing an infrastructure in TransJordan during the Mandate period. In general terms, this infrastructure provided TransJordan with an effective system of political authority, centralized in Amman, and it provided, albeit it at a rudimentary level, the physical and social infrastructure that formed the basis for the modernization of the economy. These developments took place at a time when the League of Nations had decided that national self-determination in the form of independent statehood was the goal to which the 'A' class Mandated territories should aspire. Thus, the Mandate period became the pivotal moment for the creation of a modern state in TransJordan.

One aspect of Britain's role in developing an infrastructure can be seen in the reordering of TransJordan's spatial contours between 1921 and 1946. This reordering process took place at several different levels. TransJordan was endowed with international boundaries, and further sub-divided into administrative Districts, Liwas, Qadas, and Nahiyas, and there were also regional boundaries set up for military purposes. These boundaries were of political-geographical significance. They exhibited an attitude to space that was functionally determined, and required the limits of the Mandate's authority to be circumscribed within manageable space.

On another level, a different kind of boundary line began to emerge through the process of land reform. This process, from the fiscal survey through land settlement and the cadastral and topographical surveys, entailed the collation and storage of a mass of information about the cultivable land and its people. This process not only maintained the tilt towards agriculture that had begun in the late Ottoman period; it also institutionalized and systematized land tenure in a more extensive manner than had been achieved under Ottoman rule.

One consequence of this institutional bias towards agriculture and the sedentary communities in TransJordan, was the opening up of a cleavage between the 'desert and the sown'. Poverty amongst the desert-based tribes forced them into a closer, more permanent physical and temporal relationship with the cultivable zone than had existed before. But it was also an unequal relationship, particularly for those tribes which had no extensive land claims, or whose land was on the desert fringe and of poorer quality. Within tribes, too, there were tribesmen and their families whose access to fertile land or to any land, was severely restricted.

Changes in the boundaries of wealth and social status based on landownership altered the overall social structure that had once existed in TransJordan. In the long period

before the restoration of Ottoman rule in 1867, the 'desert and sown' had known only one boundary, that formed by the '*Khuwa*', and as such a boundary of loyalty to tribal solidarity or '*Asabiya* (al-Azmeh 1986:76). However, the development of markets and political patronage beyond the control of the tribes, and the erosion of the economic base of pastoral nomadism, particularly in the 1920s and 1930s, restructured relations between the 'desert and the sown' to the advantage of the sedentary communities.

From this cleavage, between those inhabiting the cultivable zone and those on its margins or in the desert, between those who owned land and those who did not, there emerged a stratification based on TransJordan's spatial contours. Farming conferred a greater possibility of economic advancement (climate permitting), and this in turn reinforced the economic supremacy of the densely populated cultivable zones of Ajlun and the Belqa, and certain parts of Kerak.

Throughout the Mandate period, there was a slow but discernible growth of urban areas. At the end of the First World War, Salt had been the principal town in TransJordan. However, with the onset of the Mandate, Abdullah found Amman a more neutral settlement in which to base his Court, while for the British, Amman had the advantage of being close to the Hejaz Railway. Amman grew throughout the Mandate period, as it became the political and financial centre of TransJordan, and Salt suffered as a result. Nevertheless, the improvements that were made to the road network benefitted villages and towns such as Irbid, Ajlun, Madeba, and Kerak. Mafraq in particular began to grow, as it was located on a crucial junction of both the Haifa-Baghdad Road, and the Haifa-Kirkuk Oil Pipeline. Between Mafraq and Amman, Zarka began to acquire its character as a military town, largely because the TJFF were stationed there.

One other spatial contour can be discerned as it took shape in the Mandate period, the boundary between the public and private spheres of the state. A modern state was only in the process of formation between 1921 and 1946, but while the state apparatus grew more rapidly than the economy, there were limits to the extensiveness of state power (see below). If the growth of the state was limited, this was due in part to the unwillingness of the Mandate administration to finance it expansion, and due in part to the slow growth in the domestic economy which hampered any expansion from within TransJordan that might have taken place. In any case, the promotion of a capitalist economy set limits upon government intervention in the economy, and there was evidence in the privately-funded water bore schemes, and the demand for cash crops, that the private sector could achieve better results more quickly than could the Mandate administration, with its cumbersome bureaucracy.

The Mandate provided TransJordan with a governmental system that was omnipresent but not oppressive. The TransJordan Government and its agencies had the physical means to reach all parts of the country in a short space of time. The land reform process created a relatively strong rural private sector, though the size of landholdings was small and actual agricultural performance in many years of the Mandate was disappointing. The growth of the state apparatus meant that by 1946 that state was in a strong position to intervene in the economy,both as a source of employment, and as a source of capital investment.

Institutions and Policy Regimes

The Mandate administration created a range of political, military, and judicial institutions in TransJordan, often borrowing from the Ottoman example.Institutions such as the Legislative Council, the military, the central and local government apparatus, and the judiciary slowly began to impinge upon the public consciousness. It is important to recognise that the political changes imposed on TransJordan in the Mandate period interacted with the socio-economic changes that had been taking place since the late Ottoman period. The peculiarity of the Mandate, in this regard, is that the British approached the administration of the Mandate from the top down. It was an intensely political approach which first built the institutions of state, and then tried to shape social and economic patterns in accordance with political demands. To some extent it was relatively easy for the British to impose political changes in this way on TransJordan, for the period between 1918 and 1920 had seen Ottoman power collapse. This left a power vacuum that the tribes hoped to fill, but the interests of the sedentary communities had begun to diverge away from those of the tribes, and dovetailed with Britain's imperial interest in creating a Hashemite authority based in Amman.

Nevertheless, in the brief period of time which constituted the most effective years of the Mandate, 1924-1946, it was only the foundations of a modern state that were laid down. The end of the Mandate did not leave TransJordan with large, fully-matured institutions. With the exception of the military and the judiciary, it is hard to see that institutions in this period had extensive power, when the Department of Health had a staff that numbered less than 50, and the grandly-named Department of Development in 1939 a staff of three.

The creation of political-administrative institutions was not the only legacy of the Mandate as far as TransJordan's infrastructural development is concerned. Just as important was the creation over many years of what may be termed, policy regimes. That is, individual government departments began to set goals for themselves, and acquire the capabilities to achieve them. Policy regimes did not emerge in every government department simultaneously, their genesis being peculiar to the department

concerned. For example, in the Department of Health, a policy regime can be identified with the campaigns against infectious diseases which began in 1927. In part, this was initiated by the Mandate administration's obligations to the League, but it was also a response to life-threatening situations. These campaigns became a policy regime only when the Department had been reorganised in 1926 and given the human and physical infrastructure to make the policy enforceable. Nevertheless, infrastructural provision did not facilitate all the DOH's policy objectives. The staff repeatedly complained about the underfunding of their department, and this financial restriction meant that there was no real progress in reducing the rate of infant mortality.

A policy regime also began to emerge in the 1940s with regard to forestry. The TransJordan Government inherited a crisis in forestry in 1921, owing to the ravages of the First World War, but although a Woods and Forests Law was passed in 1925, it was ineffective. Nevertheless, though the condition of TransJordan's forests was considered to be perilous as late as 1944, by this time a policy regime had emerged which deliberately enclosed certain areas for forest and soil conservation. Over time this became not just a success, but was considered in 1950 to be one of the most advanced forestry schemes in the Middle East (Kingston 1990:348-349).

Even in the case of water resources, where actual improvements had been disappointing by 1946, a policy regime had been established which identified the key problems as the wastage of water, the lack of water rights legislation, and the lack of the control of the riparian systems of the Jordan and Yarmouk rivers. The more efficient use of existing water resources, and the provision of more canals to irrigate the Jordan Valley and the highlands of the plateau were proposed by Ionides. The problem here became one of finding the means to implement policy. TransJordan's water resources were examined a further eight times in official reports between 1938 and 1953, but all of them reached the conclusions that Ionides had reached in 1938 (Kingston 1990:338). In this case, the policy regime was weakened because of the capital costs of major irrigation works. This meant that outside funding was needed, and there were also time delays caused by differences of opinion between the 'experts' which prevented the earlier fruition of these schemes.

The Agricultural Economy and Society

The British Mandate inherited from the Ottoman Empire interconnected social and economic processes. The late Ottoman period marked the beginning of the modern era in TransJordan, with the move toward capitalist agriculture coupled with land reform, and the trends toward land registration and sedentarization amongst the nomadic tribes. These processes were accelerated in the Mandate period because the Mandate

administration believed that agriculture was the engine of prosperity in TransJordan,and thus was keen to see land privatized, and the tribes sedentarized.

What accelerated the process of sedentarization in the Mandate period was a combination of factors, including government policy, the economic consequences of the drought, the fall in the price of camels in the Cairo markets, and the restrictions on tribal movements imposed by international boundaries. The tribes could no longer sustain their pastoral economy in relative independence from the central authority in Amman, and were thus forced to forge ever closer links with the sedentary communities, even though they themselves were not equipped with the means to make sedentarization an instantly successful strategy.

Thus, in the early 1930s, the Government was forced to intervene in the agricultural sector in an attempt to address the destitution amongst the tribes. In a very general sense, the result was the improvement schemes for agriculture, and a relaxation of the policy on sedentarization which allowed tribes to refurbish the pastoral base of their economy. Also with regard to the tribes, there was the short term measure of relief work, and in the long term, recruitment into the armed forces. This enabled the tribes to surmount what had been a serious crisis in their way of life, and they engaged in sufficient 'adaptation strategies' to maintain as much of their independence as they could (Lancaster 1981:119). However, for many of the poorer tribes and tribesmen, such as the Sirhan and the Bani Hassan, the Mandate period marked a fundamental shift away from a desert-based existence to one anchored in TransJordan.

Progress in the rest of the agricultural sector was disappointing. More people than ever before owned their own land, but the plots were small. Some improvements were made to existing water resources, either through the schemes that opened up new sources of water on the desert fringe, or the improvements that were undertaken during the campaign against malaria in the 1920s. Crop and field rotation practices did begin to change, and in some cases agricultural machinery was imported from abroad. But in most cases, farming practice and technology remained primitive. Above all, the protracted drought did not make investment an attractive option while the cultivators themselves could not afford to buy modern machinery and other inputs to increase yields.

If there was a weakness towards agricultural policy in the Mandate period, it was an exaggerated view of what could be achieved by agriculture in TransJordan. In more recent times, Braudel (1972:241-245) has emphasised the precarious nature of the Mediterranean zone with regard to farming in a climate with fragile soils and fluctuating rainfall, and thus its 'double constraint...poverty and the uncertainty of the morrow'. During the Mandate period, however, there was a passionate, almost

messianic belief in some quarters that mankind could transform the desert into a 'Garden of Eden'. Notwithstanding the improvements that it was possible to make without threatening the long term future of TransJordan's soil and water resources, it would appear that the intensive agriculture favoured in Palestine was not, in fact, a suitable policy for TransJordan.

The Personality Factor

Hamarneh (1985 :151) has argued that the Mandate administration had no intention of promoting economic development in TransJordan, but preferred to maintain public order in a chaos-free, stand-still society. The evidence on this is patchy to say the least. Hamarneh overlooks the extent to which the obstacles to development were not deliberately created by the British, but were a consequence of other events, such as the drought, and of key personalities in the Mandate administration.

For example, two years before Cosmo Parkinson in 1933 called for more economic development in TransJordan, this view had been expressed by the Foreign Office counsellor, Sir George Rendel. Rendel viewed TransJordan to be in a favourable position for development, saying, 'I do not see why we should not now aim rather more definitely than we have hitherto done at developing TransJordan on lines which will bring it nearer to eventual independence which an 'A' Mandate necessarily contemplates' (Memorandum by Rendel, 'Policy of His Majesty's Government Regarding the Status of TransJordan', May 13th 1931, FO 371 15334). Rendel went on to argue that if this policy were to be adopted, TransJordan would need a British Resident in Amman with 'a higher status and a much greater degree of independent authority than he at present possesses'. He then referred to Cox (but not by name), saying, 'I understand confidentially from the Colonial Office (and I personally share their hesitation on this point) that it is doubtful whether this can be done while the present holder of the post remains'.

Rendel seemed to imply that a more imaginative and aggressive man than Cox appears to have been, could have argued TransJordan's case for more money from the Treasury with greater success. There is no way of knowing this. What can be said is that Cox was sent to Amman with the brief to exercise tight control of TransJordan's budget. Insofar as Cox initiated a reign of financial austerity which lasted throughout his tenure of office, from 1924 to 1939, it can be argued that he was only doing the job he was sent to TransJordan to do. It would appear to be the case, then, that while the principal of economic intervention in a systematic way was becoming a feature of Colonial policy, the absence of precise mechanisms meant that for men such as Cox, the practical requirements of such policy making were not clear.

It was during the interwar period in the UK that the dominance of 'laisser-faire' economics was challenged, largely as a result of the economic depression and the high rates of unemployment (Stewart 1972:40). In the Colonies and the Mandated territories, officials began to take a more active role in economic decision making, and the first attempts to coordinate social and economic development began in the 1930s (Gann & Duignan 1968:262; Robinson 1965:25). Nevertheless, it is difficult to see men of a military background, such as Cox and Kirkbride, in a climate set by the view that there were limits to government, advocating anything other than a minimalist approach to economic intervention in TransJordan. It is also the case that economic development, in the strategic sense in which it has become familiar since 1945, was a novelty in the 1930s. When John Oliphant in 1939 was asked to recommend a replacement for Ionides, his initial response was to say 'Director of Development is a new one on me. It seems a grandiloquent title for an irrigation engineer...These pooh-bah jobs are a problem' (Oliphant [Forestry Institute, Oxford] to Major Furse, January 17th 1939, CO 831 49/18).

In addition to these philosophical arguments, much of the evidence in the preceding chapters has suggested that, in practical terms, the mechanics of the Mandate administration were overloaded with bureaucratic routines. Not the least of these were the endless and microscopic discussions of budget and policy proposals that went from Amman to Jerusalem to London and back again. These routines created delays, sometimes lasting years, so that projects were begun but not completed.

The Underexploitation of TransJordan's Human Resources

In some respects, the achievements of the Mandate period were greater than its failings. That the foundations of a modern state were being laid between 1921 and 1946 can be seen in many ways. There was an increase in the range of medical facilities that were available to the public, and more children went to school than ever before. TransJordan's transport profile was transformed with the introduction of motor vehicles and the upgrading of the road network. Modern communications in the form of the telephone and the telegraph became common, even if civilian access was limited. All of these developments marked an advance on what had been achieved under Ottoman rule, however, the provision of social services was not comprehensive, and tended to be confined in the larger towns and villages in Ajlun and Belqa.

The tragedy of this situation is that the evidence is there to show that the people in TransJordan were enthusiastic about improving the quality of their lives. In earlier chapters this has been registered by the great demand that existed for cash crops in the early 1930s, and the fact that the private sector exploited opportunities as they appeared. The enthusiasm for modern transportation and roads was evident from early

on in the voluntary contribution to road-building schemes that villagers made, which benefitted both trade, and the Government's tax collecting abilities. It was action at the grass roots which enabled the Department of Health to inoculate 55,000 people against smallpox in a six-week period, and which mobilised people in the campaigns against locusts, and malaria. The demand for education was greater than could be supplied by either the Government or non-Government sectors.

Here, then, is a case for the underexploitation of resources in TransJordan by the Mandate administration. Principally it was human resources that were not fully exploited. At the political level there may well have been too cautious an attitude to improvement where it might result in articulate and skilled professionals demanding a greater share of power at the expense of British officials. This is a persuasive argument, but the paucity of material at the policy level makes it only a hypothesis.

There is only partial evidence that the people themselves were to blame for their situation. Notwithstanding the popular enthusiasm cited above, Cox once complained that the economy was sluggish, in part because of 'the conservatism of the so-called "business-men" of TransJordan' (Cox's Accounts for the Financial Year 1926-1927, May 22nd 1928, CO 831 3/3). On a later occasion, Johnson (1954:2) described villagers in the Jebel Ajlun as exhibiting a 'wantlessness', 'or the situation in which people are apparently satisfied with their low standard of living, security, sanitation, and production'. The least that one can say is that there is evidence that such 'wantlessness' was not universal, that there were enthusiastic people who wanted to improve their lives, and others who were, apparently, content with their lot.

In the case of TransJordan's businessmen, it can be argued that it is not that they were conservative but that they were constrained by the economic climate during most of the Mandate period. Although TransJordan is noticeable for its resource deficits, it has exploitable deposits of various minerals, as was described in Chapter Two above, and as Quennell (1952:114) noted. In the Mandate period, minerals were exploited, but in the case of phosphates, not without difficulties.

The TransJordan Phosphates Company [TJPC] was formed in 1935 to mine phosphates at Roseifa near Amman. Mining began in late 1941, but by the summer of 1942 the firm was experiencing severe problems. It experienced delays owing to the lack of motor vehicles at its disposal, and the situation in the harvest period when pack animals which had been used to freight phosphates from the mine to the railway station were taken away for use in the fields. Labour problems also surfaced during the harvest season, largely because TJPC could not afford to pay their workers as much as could be earned working on the harvest. Lastly, because of the War, there were long delays as supplies ordered from the UK were lost at sea. TJPC did not receive any

assistance from the TransJordan Government. But what also delayed the development of phosphate mining in this period was the fact that Egypt could produce phosphates at a cheaper price. Not only did this make it difficult for TJPC to find markets, there was also a lack of capital investment to reduce costs at Roseifa. Even large corporations like ICI were unwilling to invest in the Middle East at this time, since they considered the area to be unstable, and were making profits elsewhere.

Another entrepeneur, Wafa Dajani, had ambitious plans for the development of Aqaba port. At the height of the North Africa campaign, British anxieties about the security of the Suez Canal led the Treasury to advance £50,000 for the development of Aqaba as a relief port. Some small docking facilities were constructed, and a road built from Aqaba to Naqb Shtar from whence it was connected to Ma'an by an extension of the Hejaz Railway. However, in 1942 the victory at El Alamein reduced the significance of Aqaba, and Dajani's proposals were considered too ambitious and were not taken up at that time.

In spite of the hardships of the Mandate period, entrepeneurs like Kawar and Dajani, and Tewfiq Qattar and the Bisharat brothers, were committed to TransJordan, and in the 1940s when the demand for foodstuffs for British forces in Palestine and TransJordan grew, it was the merchant houses, as well as some cultivators who reaped the benefit. In the long term, the merchant houses that had been established by the Mandate period, secured for themselves a position in TransJordan's economy which has continued to this day.

The evidence, then, suggests that there was, in TransJordan, a deep reservoir of popular enthusiasm for prosperity which was underexploited by the Mandate administration. But, again and again, one comes back to the combined effects of the drought between 1924-1936, and the parsimony of H.M.Treasury. The former deprived TransJordan of the domestic revenue it might have been able to spend on agricultural inputs, health and education. The latter was the consequence of a narrow, short-term perspective of TransJordan which could see little prospect of the prosperity emerging to repay loans, and lighten the burden of Grant-in-Aid. The sums that were advanced in the 1930s for economic development were small, and selectively apportioned, and can be said to have ameliorated conditions, rather than to have changed them fundamentally.

Lastly, the temporal factor in development suggests that even in the confines of the whole of the Mandate period, of 25 years, it would have been too much to have expected the first fruits of long-term developments to have been available before 1946. Given the late start to the projects initiated by the Colonial Development Fund and their small-scale nature, it is asking too much of the period under review to have done much more than have begun long-term developments.

The overall significance of the Mandate period for TransJordan was the way in which the modernising process extant since Ottoman times, converged with Britain's imperial interests to lay the foundation of the modern state. The process of modernization had begun in the late Ottoman period with the onset of capitalist agriculture through land reform and the beginnings of a sedentarization process amongst TransJordan's tribes. The Ottoman authorities had quite deliberately sought to modernize its Arab/Islamic provinces from the late 1830s onwards. They viewed the process as the necessary means whereby the Empire could survive in competition with the four great European Empires that were growing at this time, Britain, France, Germany and Russia. But this modernizing process was designed to strengthen the imperial system, not to create such strong economies in the provinces that they would want to break loose from the control of the Sublime Porte.

And here, surely, is how imperialism creates the unintended consequence whereby economic development generates in the periphery the demands that run counter to centralized imperial control.

In the context of the British Empire and the Mandated territories, there is the argument cited earlier, that Britain had an 'itch to administer maladministered peoples'. This meant that the British would never be satisfied merely to have access to lucrative raw materials in a colony, and not seek to impose their political demands across the territory. Unlike other imperial powers who practised imperial neglect (the Belgian Congo being a notorious example), Britain entered foreign lands and tried to shape them in accordance with the principles of 'western democracy', and capitalism. In this respect, the lack of commercially exploitable resources in TransJordan was an obstacle to change, but change, nevertheless took place, and it was the very kind of change that led to the creation of an independent state.

It was not an explicit commitment to independence that motivated this change, even though such an end was envisaged in the Covenant of the League. Rather, it was the determination to create manageable space which led to the creation of the foundations of a state, for this was, in a mechanistic sense, the way in which the British organized their affairs. Much of what happened in TransJordan was an *ad hoc* response to events as they occurred, but much too, was ordained by the principles of sound administration, and this led to the creation of an infrastructure of power, to the elements of a physical and social infrastructure and thus, the foundations of a modern state.

The extent to which these were solid foundations was revealed in 1948, two years after independence, when the Jordanian state, far from collapsing under the weight of the conflict with Israel, had extended its borders to the west bank, and had begun to absorb

750,000 Palestinian refugees. This was not just a military success, in terms of conquered territory. It was also an administrative success, in the sense that though TransJordan's institutions were still only in an early stage of growth, it was possible for them to expand to meet the challenge of a new and difficult era. Indeed, the Jordanians benefitted from having a deeper resource base with the extension of power on to the west bank, while exiled Palestinians found employment and new opportunities in Jordan. However, in the long term the failure to resolve the conflict between Israel and the Palestinians threatened to undermine Jordan's stability; this has been the case since 1967.

NOTES

1. When Rashid Ali mounted a coup in 1941 against the Hashemite Government in Iraq, there was a swift response by elements in TransJordan in support of the coup. There was a student demonstration in Amman which resulted in the sacking of two teachers, and the temporary expulsion of 40 boys from the school, six of them permanently. Also, a detachment of the TJFF at Ma'an were discovered to have stored arms and ammunition in anticipation of a popular uprising against Abdullah and the British, but this did not materialize, nor was there any support for such actions in the ranks of the Arab Legion (Political Situation Report for May 1941, CO 831 58/2).

BIBLIOGRAPHY

PRIMARY SOURCES

i PUBLIC RECORD OFFICE, LONDON

CO 537 Colonial Office: Colonies: Supplementary Original Correspondence

CO 732 Colonial Office: Middle East: Original Correspondence

CO 733 Colonial Office: Palestine: Original Correspondence

CO 831 Colonial Office: TransJordan: Original Correspondence

FO 371 Foreign Office: Original Correspondence: Political

FO 816 Foreign Office: Embassy and Consular Archives: Jordan: Correspondence

FO 882 Foreign Office: War of 1914 to 1918: Arab Bureau Papers

FO 922 Foreign Office: Middle East Supply Centre

WO 252 War Office: Topographical and Economic Surveys

ii. ST ANTONY'S COLLECTION, THE MIDDLE EAST CENTRE, ST ANTONY'S COLLEGE, OXFORD

The Brunton Papers

W.B.Tripe 1942 Report on TransJordan

Papers of the Jerusalem and East Mission

iii. THE LIBRARY, UNIVERSITY OF BIRMINGHAM, UK.

ARCHIVES OF THE CHURCH MISSIONARY SOCIETY

CMS/G3/PP6-PP8

CMS/AS 35-49/G2/Pe1

CMS/AS 35-49/G2/Pg1

CMS/AS 35-49/G2Pm4

iv. THE BRITISH LIBRARY OF POLITICAL AND ECONOMIC SCIENCES, LONDON

LEAGUE OF NATIONS DOCUMENTS

Report by His Britannic Majesty's Government in the United Kingdom and Northern Ireland to the Council of the League of Nations on the Mandate of Palestine and TransJordan, 1925-1938 (14 Volumes) (London:HMSO).

The Responsibility of the League of Nations Under Article 22 of the Covenant (December 8th 1920) Assembly Document no 161 (Geneva: League of Nations)

Minutes of the Permanent Mandates Commission, 1923-1938 (16 Volumes) (Geneva: League of Nations)

v. THE LIBRARY, THE LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

Annual Reports of the Department of Health, TransJordan, 1926-1939 (3 Volumes)

V. AC 292

vi. ARCHIVES OF THOMAS COOK & SON LTD, 45 BERKELEY ST, LONDON W1

Cook's Traveller's Gazette, 1907

vii. OFFICIAL PUBLICATIONS

Accounts & Papers Vol XCVII (1909)

Accounts & Papers Vol XCVIII (1909)

Accounts & Papers Vol C (1912-1913)

CMD 1195 The Franco-British Convention, December 23rd 1920 (London: HMSO)

CMD 1785 League of Nations Mandate for Palestine and TransJordan (London: HMSO, 1922).

Parliamentary Debates (House of Commons) [Hansard] Fifth Series, Vol 240, 1929-1930

Bureau of Intelligence & Research, USA 1969
Jordan-Syria Boundary [International Boundary Studies No 94] (Washington, DC: Department of State)

Bureau of Intelligence and Research, USA 1970
Iraq-Jordan Boundary [International Boundary Studies No 98] (Washington, DC: Department of State)

Butler, F. & Bury, J.P. (eds) 1963
Documents on British Foreign Policy, 1st Series, Vol XIII (London: HMSO)

Falls, Capt. C. 1930
History of the Great War, Military Operations: Egypt and Palestine, Vol II (London: HMSO)

Food & Agriculture Organization & Caponera, D.A. (Preparation) 1954
Water Laws in Moslem Countries (Rome: FAO Development Papers No 54).

Government of Palestine, Office of Statistics, 1938
Statistical Abstracts of Palestine 1937-1938 (Jerusalem: Government of Palestine)

Great Britain, Admiralty, Naval Intelligence Division 1943
Palestine & TransJordan (Geographical Handbook Series BR 514) (London)

Great Britain, Admiralty, Naval Intelligence Division 1943a
Syria (Geographical Handbook Series BR 513) (London)

Ionides, M.G. 1939
A Report on the Water Resources of TransJordan and Their Development (London: Crown Agents for the Government of TransJordan)

Kasapligil, B. 1956
Report to the Government of the Hashemite Kingdom of Jordan on an Ecological Survey of the Vegetation in Relation to Forestry and Grazing (Rome: FAO)

Keen, B.A. 1946
The Agricultural Development of the Middle East: A Report to the Director General, Middle East Supply Centre, May 1945 (London: HMSO)

Seton, C.R.W. (ed) 1930
The Legislation of TransJordan, 1918-1930 (London: Crown Agents for the Government of TransJordan)

Walpole, G.F. 1944
'Land Settlement in TransJordan', Proceedings of the Conference on Middle East Agricultural Development, Cairo February 7th-10th 1944 (Cairo: Middle East Supply Centre)

Waterer, R.R. 1949
Some Observations on the Forests and Land Use in General in Jordan (Report to the Government of Jordan by the Conservator of Forests, Cyprus) (Nicosia)

Worthington, E.B. 1946
Middle East Science: A Survey of Subjects Other Than Agriculture [A Report to the Director General, Middle East Supply Centre, August 1946] (London: HMSO)

viii. THESES AND DISSERTATIONS

Betts, A. 1986
The Prehistory of the Basalt Desert, TransJordan: An Analysis
PhD Institute of Archaeology, University of London

Guckian, N. 1985
British Relations with TransJordan, 1920-1930
PhD University College of Wales, Aberystwyth

Hamarneh, M. 1985
Social and Economic Transformation of TransJordan, 1921-1946
PhD Georgetown University, USA

Hiatt, J. 1981
Between Desert and Town: A Case Study of Encapsulation and Sedentarization among Jordanian Bedouin
PhD University of Pennsylvania

Kazziha, W. 1967
The Emergence of the State of Jordan
MSc University of Edinburgh

Kingston, P.W.T. 1990
Pioneers in Development: The British Middle East Development Division and the Politics of Technical Assistance, 1945-1961
DPhil University of Oxford

Al-Omosh, A. 1991
From Tent to Town: Social Change in Mughair al-Sirhan, The Hashemite Kingdom of Jordan (1500-1990)
PhD New School of Social Research, USA

Palmer, C. nd
Crop Husbandry Practices in the Mediterranean Zone and their Implications for Ancient Agriculture
MA University of Sheffield

Robins, P.J. 1988
The Consolidation of Hashemite Power in TransJordan, 1921-1946
PhD University of Exeter

Rogan, E,L. 1991
Incorporating the Periphery: The Ottoman Extension of Direct Rule Over Southern Syria [TransJordan] 1867-1914
PhD Harvard University

Saleh, J.M. 1977
The Evolution of the Banking System of Jordan
MSc University of Keele

Wåhlin, L. 1992
Back to Settled Life? An Historical Study of Changing Living Conditions in the 'Allan Area of Jordan, 1867-1980
PhD (Draft Version) Stockholm University

IX. SECONDARY SOURCES

Abdullah King 1951
Memoirs (edited by P.Graves) (London: Jonathon Cape)

Abidi, A. 1965
Jordan: A Political Study 1948-1957 (London: ASRA Publishing House)

AbuJaber, K. 1969
'The Legislature of the Hashemite Kingdom of Jordan: A Study in Political Development' Muslim World 59, 220-250

AbuJaber, R.S. 1989
Pioneers Over Jordan: The Frontier of Settlement in TransJordan 1850-1914 (London: I.B.Tauris)

Abu Nowar, M. 1989
The History of the Hashemite Kingdom of Jordan Vol 1: The Creation and Development of TransJordan 1920-1929 (London: Ithaca Press)

Al-Azmeh, A. 1986
'Wahhabite Polity', in Netton 1986: 75-90

Allen, R. 1974
Imperialism and Nationalism in the Fertile Crescent (New York: Oxford University Press)

Amawi, A. & Fischbach, M. 1991
'New Indigenous Sources for the socio-Economic History of TransJordan During the Mandate Period' MESA Bulletin, 25, 2, 169-172

Anderson, F. 1949
'A Sketch of the Ethnical, Social, and Political Question in TransJordan, Syria, and Iraq' Eastern Churches Quarterly, 8, 2, 97-117

Antoun, R. 1972
Arab Village: Social Structural Study of a TransJordanian Peasant Community (Bloomington, IND: Indiana University Press)

Aresvik, O. 1976
The Agricultural Development of Jordan (New York: Praeger Press)

Aroian, L. & Mitchell, R.P. 1984
The Modern Middle East and North Africa (New York & London: Collins/Macmillan)

Aruri, N. 1972
Jordan: A Study in Political Development (1921-1956) (The Hague: Martinus Nijhoff)

Atkinson, K., Beaumont, P., Bowen-Jones, H., Fisher, W.B., & Gilchrist-Shirlaw, D.W. 1967
Soil Conservation Survey of Wadi Shoeib and Wadi Kifrein, Jordan (University of Durham, for the UNDP/FAO Training and Demonstration in Afforestation and Forest Management)

Atkinson, K. & Beaumont, P. 1971
'The Forest in Jordan' Economic Botany 25, 305-311

Baram, P.J. 1978
The Department of State in the Middle East 1919-1945 (Pittsburgh: University of Pennsylvania Press)
Barnes, C. 1978
'The TransJordan Frontier Force' Asian Affairs 9, 1, 67-69

Baylson, J. 1987
Territorial Allocation by Imperial Rivalry: The Human Legacy in the Near East (University of Chicago, Department of Geography, Research Paper no 221)

Beaumont, P., Blake, G., & Wagstaff, J.M. 1988 (2nd Edition)
The Middle East:A Geographical Study (London: David Fulton)

Bidwell, R. 1989
Review of Mary Wilson: 'King Abdullah, Britain and the Making of Jordan', Middle East Journal 43, 2, 298-299

Birch, B.P. 1988
'The Development of TransJordan During its Mandate Period' Proceedings of the Annual BRISMES Conference 1988, 146-157

Bocco, R. 1989
'Rethinking Segmentary Lineage Theory in Southern Jordan: Logics of Land Division and Redistribution Among the Howietat' Proceedings of the Annual BRISMES Conference, 1989, 4-16

Braudel, F. 1972
The Mediterranean and the Mediterranean World in the Age of Philip II, Vol 1 (Translated by Siân Reynolds) (London: Collins)

Brown, L. Carl 1990
'A Twice-told Tale: British and American Efforts to Organize the Middle East', in Esfandiari & Udovitch, 1990, 23-42

Bulliet, R.W, 1975
The Camel and the Wheel (Cambridge, MASS: Harvard University Press)

Butler, Sir G., & Maccoby, S. 1928
The Development of International Law (London: Longman)

Carmichael, J. 1991
'The Dead-End Peace Conference' Midstream XXXVIII, 8, 2-3

Casto, E.R., & Dotson, O. W. 1938
'Economic Geography of TransJordan' Economic Geography XIV, 121-130

Chizik, I. 1935
'The Political Parties in TransJordania' Journal of the Royal Central Asia Society, 22, 96-99

Cooke, H. 1952
Challenge and Response in the Middle East (New York: Harper & Brothers)

Cowie,H., Harlow, C., & Emerson R. 1984
Rebuilding the Infrastructure: The Needs of English Towns and Cities (London: Policy Studies Institute)

Dann, U. 1976
'The United States and the Recognition of TransJordan 1946-1949' Asian and African Studies [Jerusalem] 11, 2, 213-239

Dearden, A. 1958
Jordan (London: Robert Hale)

Diab, H., & Wåhlin, L. 1983
'The Geography of Education in Syria in 1882, with a translation of "Education in Syria" by Shahin Makarius, 1883' Geografiska Annaler 65B, 2 sid 105-128

Dobbs, H. 1932
'Commercial Possibilities in the Middle East' Journal of the Royal Central Asia Society, 19, 667-670

Douglas, R. 1986
World Crisis and British Decline 1929-1956 (London: Macmillan)

Drysdale, A., & Blake, G. 1985
The Middle East and North Africa: A Political Geography (New York: Oxford University Press)

'Durbin' 1929
'The TransJordan Mandate' English Review, 7, 77-81

Epstein, E. 1938
'The Bedouin of TransJordan: Their Social and Economic Problems', Journal of the Royal Central Asia Society, 25, 228-236

Esfandiari, H., & Udovitch, A. (eds) 1990
The Economic Dimensions of Middle Eastern History (Princeton, NJ: The Darwin Press)

Farouk-Sluglett.M., & Sluglett, P. 1990
Iraq Since 1958: From Revolution to Dictatorship (London:I.B.Tauris)

Ficheleff, A. 1932
Le Statut International de la Palestine Orientale (La TransJordanie) (Paris: Librairie Lipschutz)

Firestone, Y. 1990
'The Land-Equalizing Musha Village: A Reassessment', in Gilbar 1990 91-129

Fischbach, M. 1990
'Observations on Land Ownership in Liwa Ajlun During the Mandate', An-Nadwah [Amman], 11, 3, October, 26-30

Fisher, W.B., Atkinson, K., Beaumont, P., Coles, A., & Gilchrist-Shirlaw, D. 1966
Soil Survey of Wadi Ziqlab, Jordan (University of Durham, for UNDP)

Flapan, S. 1987
The Birth of Israel: Myths and Realities (New York: Pantheon Books)

Foot, H.M. 1964
A Start in Freedom (London: Hodder & Stoughton)

Forbin, V. 1934
Le "Pipe-Line" sous les Murs de Ninive (Paris: Edition Boudinière)

Foster, H. 1935
The Making of Modern Iraq (Norman, OA: Oklahoma University Press)

Fromkin, D. 1989
A Peace to End All Peace: Creating the Middle East 1914-1922 (London: André Deutsch)

Gann, L. & Duignan, P. 1968
Burden of Empire (London: Pall Mall Press)

Gibbons, J. 1936
The Road to Nazareth (London: Robert Hale)

Gilbar, G. (ed) 1990
Ottoman Palestine 1800-1914: Studies in Economic and Social History (Leiden:E.J.Brill)

Glubb. J.R. 1938
'The Economic Situation of the Trans-Jordan Tribes', Journal of the Royal Central Asia Society, 25, 448-459

Glubb, J.R. 1948
The Story of the Arab Legion (London: Hodder & Stoughton)

Glubb, J.R. 1959
Britain and the Arabs (London: Hodder & Stoughton)

Goichon,A.M. 1972
Jordanie Réelle, Tome I (Paris: G-P Maisonneure & Larose)

Grant, C.P. 1937
The Syrian Desert: Caravans, Travel and Exploration (London A & C Black)

Grunwald, K. 1932
The Government Finances of the Mandated Territories in the Middle East (Tel-Aviv: The Palestine economic Society)

Gubser, P. 1983
Jordan: Crossroads of Middle Eastern Events (Boulder, COL: Westview Press)

Hacker, J. 1960
Modern 'Amman: A Social Study (edited by J.I. Clarke) (Durham: Department of Geography, Research Papers no 3)

Hall, H.D. 1948
Mandates, Dependencies, and Trusteeship (London: Stevens & Sons)

Hamilton, N. 1928
Both Sides of the Jordan (London: Herbert Jenkins Ltd)

Harris, G. 1958
Jordan (New York: Grove Press Books & Everyman Books)

Heclo, H. & Wildavsky, A. 1974
The Private Government of Public Money (London: Macmillan)

Hershlag, Z.Y. 1964
Introduction to the Modern Economic History of the Middle East (Leiden: E.J.Brill)

Himadeh, S.B. (ed) 1936
Economic Organization of Syria (Beirut: The American Press; reprint by AMS 1973)

Himadeh, S.B. 1936
'Monetary and Banking System', in Himadeh 1936: 263-329

Hinnebusch, R. 1990
Authoritarian Power and State Formation in Ba'athist Syria (Boulder, Col: Westview Press)

Hinsley, F.H. (ed) 1977
British Foreign Policy Under Sir Edward Grey (Cambridge: Cambridge University Press)

Holt, P.M. 1966
Egypt and the Fertile Crescent 1516-1922 (London: Longman)

Horne, E. 1982
A Job Well Done [Being a History of the Palestine Police Force, 1920-1948] (Essex: The Anchor Press)

Hourani, A. 1946
Great Britain and the Arab World (London: John Murray)

Hurewitz,J. 1956
Diplomacy in the Near and Middle East 1914-1956 Vol II (Princeton, NJ: D. Van Norstrand)

Hütteroth, W. & Abdulfattah, K. 1977
Historical Geography of Palestine, TransJordan and Southern Syria in the Late 16th Century (West Germany: Erlangen)

Ionides, M.G. 1940
'The Water Resources of TransJordan and their Development' Water and Water Engineering, August 1940, 272-273

Ionides, M.G. 1941
'The Water Resources of TransJordan' (Part 1) Engineering, 151, 181-183

Ionides, M.G. 1941
'The Water Resources of TransJordan' (Part 2) Engineering, 151, 244-245

Ionides, M.G. 1946
'Jordan Valley Irrigation in TransJordan' Engineering, 162, 241-243

Ismael, T. (ed) 1970
Governments and Politics of the Contemporary Middle East (Homewood, Ill:The Dorsey Press)

Issawi, C. (ed) 1966
The Economic History of the Middle East 1800-1914 (Chicago: Chicago University Press)

Issawi, C. (ed) 1988
The Fertile Crescent 1800-1914: A Documentary Economic History (New York & Oxford: Oxford University Press)

Jarvis, Major C.S. 1936
Three Deserts (London: John Murray)

Jarvis, Major C.S. 1946
Arab Command: The Biography of Lt-Col F.G. Peake Pasha (London: Hutchinson & Co)

Jefferies, J. 1939
Palestine: The Reality (London: Longman)

Johns, J. 1989
'Settlement and Land Exploitation Strategies in the Ard al-Kerak During the Islamic Period' (Paper Presented to the IVe Congrés sir L'Histoire et L'Archaeologie de Jordanie, Lyon 30 Mai/4 Juin)

Johnson, P.,B. 1954
Land Study: Five Villages in Jordan (Philadelphia, PA: American Friend Service Committee)

Joll, J. 1978
Europe Since 1870: An International History (Harmondsworth: Penguin Books)

Kark. R. 1984
'Changing Patterns of Landownership in Nineteenth-Century Palestine: The European Influence', Journal of Historical Geography, 10, 4, 357-384

Kark, R. (ed) 1989
The Land That Became Israel: Studies in Historical Geography (New Haven & London: Yale University Press)

Kark, R. 1989
'Transportation in Nineteenth-Century Palestine: Reintroduction of the Wheel', in Kark 1989: 57-76

Kazziha, W. 1979
'The Political Evolution of TransJordan', Middle Eastern Studies, 15, 239-257

Keeling, E.H. 1934
'The Proposed Haifa-Baghdad Railway', Journal of the Royal Central Asia Society, 21, 373-393

Kent. M. 1977
'Constantinople and Asiatic Turkey 1905-1914', in Hinsley 1977: 148-264

Khalidi, T. (ed) 1984
Land Tenure and Social Transformation in the Middle East (Beirut)

Khoury, P.S. 1987
Syria Under the French Mandate (Princeton, NJ: Princeton University Press)

Kirkbride, A.S. 1956
A Crackle of Thorns (London John Murray)

Klieman, A.S. 1970
The Foundations of British Policy in the Arab World: The Cairo Conference of 1921 (Baltimore & London: The Johns Hopkins Press)

Klieman, A.S. 1981
Israel, Jordan, Palestine: The Search for a Durable Peace (Beverley Hills, CA: SAGE, for the Center for Strategic and International Studies)

Kohn, H. 1929
'Die staats-und verfassungsrechtliche Entwicklung des Emirats Transjordanien', Archiv für Öffentliche Rechts (April) 238-267 (Tübingen)

Kohn, H. 1932
Nationalism and Imperialism in the Hither East (London: George Routledge & Sons)

Konikoff, A. 1943
TransJordan: An Economic Survey (Jerusalem: Economic Research Institute of the Jewish Agency for Palestine)

Konikoff, A. 1946 (2nd Edition)
TransJordan: An Economic Survey (Jerusalem: Economic Research Institute of the Jewish Agency for Palestine)

Lancaster, W. 1981
The Rwala Bedouin Today (Cambridge: Cambridge University Press)

Lancaster, W. & Lancaster, F. 1989
The Village of Smakia: A Preliminary Report (Unpublished Ms)

Lancaster, W. & Lancaster, F. 1991
Khirbet Faris Report-Ethnomethodology, 1991 Season (Unpublished Ms)

Landau, J. 1971
The Hejaz Railway and the Muslim Pilgrimage: A Case Study in Ottoman Propaganda (Detroit, MI: Wayne State University Press)

Landau, R. 1937
'The Emir Abdullah', The Spectator, August 6th, 233-234

Lawless, R. (ed) 1987
The Middle Eastern Village: Changing Economic and Social Relations (London: Croom Helm)

Lawrence, T.E. 1962
Seven Pillars of Wisdom, A Triumph (Harmondsworth: Penguin Books)

Leatherdale, C. 1984
Britain and Saudi Arabia: The Imperial Oasis (London: Frank Cass)

Lenczowski, G. 1962 (3rd Edition)
The Middle East in World Affairs (Ithaca, NY: Cornell University Press)

Levene, M. 1992
'The Balfour Declaration: A Case of Mistaken Identity' English Historical Review, CVII, 54-77

Lewis, N. 1987
Nomads and Settlers in Syria and Jordan 1800-1980 (Cambridge: Cambridge University Press

Louis, W.R. 1984
The British Empire in the Middle East 1945-1951 (Oxford: Clarendon Press)

Low, D.A. 1973
Lion Rampant (London: Frank Cass)

Lowdermilk, W.C. 1940
'The Lost Agriculture of TransJordan', Soil Conservation, 5, 228-231

Lowdermilk, W.C. 1944
Palestine: Land of Promise (London: Victor Gollancz)

Lugard, Sir F.D. 1929 (4th Edition)
The Dual Mandate in British Tropical Africa (Edinburgh & London: William Blackwood & Sons)

Luke, H.C. & Keith-Roach, E. 1922
The Handbook of Palestine (London: Macmillan)

Luke, H.C. & Keith-Roach, E. 1930 (2nd Edition)
The Handbook of Palestine and TransJordan (London: Macmillan)

Luke, H.C. & Keith-Roach, E. 1934 (3rd Edition)
The Handbook of Palestine and TransJordan (London: Macmillan)

'M.A.' 1934
'Red Sea Refuge: Fishing and Sailing at Akaba' The Field, 13 (October 13th) 866

Mackenzie, M. 1946
'TransJordan', Journal of the Royal Central Asia Society, 33, 260-270

Maclennan, N. 1935
'General Health Conditions of Certain Bedouin Tribes in TransJordan', Transactions of the Royal Society of Tropical Medicine and Hygiene, XXIX, 3, 227-248

Mallison, W.T. & Mallison S.V. 1986
The Palestine Problem in International Law and World Order (London: Longman)

Mann, M. 1986
The Sources of Social Power Vol 1: A History of Power From the Beginning to AD 1760 (Cambridge: Cambridge University Press)

Mansfield, P. 1991
A History of the Middle East (Harmondsworth: Penguin Books)

Matthews, R.D. & Akrawi, M. 1949
Education in the Arab Countries of the Near East (Washington, DC: American Council on Education)

McCarthy, J. 1990
The Population of Palestine: Population History and Statistics of the Late Ottoman Period and the Mandate (New York: Columbia University Press)

Meredith, D. 1975
'The British Government and Colonial Economic Policy, 1919-1939' Economic History Review, 28, 484-499

Middle East Journal 1968
Document: 'Agreement for the Determination of Boundaries Between the Hashemite Kingdom of Jordan and the Kingdom of Saudi Arabia', MEJ, 22 346-348

Monroe, E. 1963
Britain's Moment in the Middle East 1914-1956 (London: Chatto & Windus)

Monroe, E. 1973
Philby of Arabia (London: Faber)

Moore, J.N. (ed) 10974
The Arab-Israeli Conflict, Vol 3: Documents (Princeton, NJ: Princeton University Press)

Morgan, D.J. 1980
The Official History of Colonial Development, Vol 1: The Origins of British Aid Policy 1924-1945 (London: Macmillan)

Netton, I. (ed) 1986
Arabia and the Gulf: From Traditional Society to Modern States (London: Croom Helm)

Nicolson, H. 1964
Peacemaking 1919 (London: Methuen & Co)

Nieter, H. 1938
'Britain in Nomad's Land: Helping Hand for the Bedouins', World Review, 20-25

Northedge, F.S. 1988
The League of Nations, Its Life and Times, 1920-1946 (Leicester: Leicester University Press)

Ochsenwald, W. 1980
The Hijaz Railroad (Charlottsville, VA: The University Press of Virginia)

Owen, R. (ed) 1982
Studies in the Economic and Social History of Palestine in the Nineteenth and Twentieth Centuries (London: Macmillan)

Palestine 1937
'TransJordan' XII, 1, January 6th, 1-3 (London: British Palestine Committee)

Palestine 1937
'TransJordan' XII, 4, January 27th, 31-32 (London: British Palestine Committee)

Palestine 1937
'TransJordan' [I] XII, 10, March 10th, 76-77 (London: British Palestine Committee)

Palestine 1937
'TransJordan' [II] XII, 11, March 17th, 87-88 (London: British Palestine Committee)

Palestine 1937
'TransJordan' [III], 12, March 24th, 95-96 (London: British Palestine Committee)

Palestine Économique (Paris: Cahiers Juif)

Pamuk, S. 1987
The Ottoman Empire and European Capitalism 1820-1913: Trade, Investment and Production (Cambridge: Cambridge University Press)

Patai, R. 1958
The Hashemite Kingdom of Jordan (Princeton, NJ: Princeton University Press)

Peake, Lt-Col. F.G. 1939
'TransJordan', Journal of the Royal Central Asia Society, 26, 375-396

Peake, Lt-Col. F.G. 1958
A History of Jordan and its Tribes (Coral Gables, FLO: University of Miami Press)

Petran, T. 1972
Syria (London: Ernest Benn)

Peursem, D.D. van 1921
'Methods of Evangelism in Arabia' Muslim World V, 267-271

Phillips, A. 1989
The Enigma of Colonialism: British Policy in West Africa (London: James Currey)

Pumphrey, M. 1935
' "But There is Neither East Nor West..." ' Contemporary Review, CXLVII, 735-741

Quennell, A.M. 1952
'The Geology and Mineral Resources of [former] TransJordan', Colonial Geography and Mineral Resources, 2, 2, 85-111

Raglan, Lord 1924
'TransJordania -And the Mandate Farce' The Nineteenth Century and After, XCV, 833-842

Raikes, R. 1967
Water,Weather and Prehistory (London: John Barker)

Randall, R. 1968
Jordan and the Holy Land (London: Frederick Muller)

Robinson, K. 1965
The Dilemma of Trusteeship (Oxford: Oxford University Press)

Rogan E.L. 1989
'Archival Resources and Research Institutions in Jordan' MESA Bulletin, 23, 2, 161-184

Rolbant, S. 1948
Hirelings of the Desert: TransJordan and the Arab Legion (London: AMAL Publications)

Rostovtzeff, M. 1957 (2nd Edition)
The Social and Economic History of the Roman Empire, Vol 1 [ed by P.M.Frazer] (Oxford: Clarendon Press)

Rudd, J. 1990
'Origins of the TransJordan Frontier Force' Middle Eastern Studies, 26, 2, 161-184

Saleh, H. 1991
'Water Resources and Food Production in Jordan', in Wilson 1991, 17-59

Sands, W. 1970
'The Hashemite Kingdom of Jordan', in Ismael 1970: 283-303

Sanger, R.H. 1963
Where the Jordan Flows (Washington, DC: The Middle East Institute)

Schechtmann, J.B. 1937
Transjordanien im Bereiche des Palästinamandates (Wien: Dr Heinrich Glanz Verlag)

Schechtmann, J.B. 1968
Jordan - A State That Never Was (New York: Cultural Publishing Co)

Schulz, G. 1972
Revolutions and Peace Treaties, 1917-1920 (London: Methuen)

Seccombe, I, 1987
'Labour Migration and the Transformation of a Village Economy: A Case Study from North-Western Jordan', in Lawless 1987:115-144

Shimizu, H. 1986
Anglo-Japanese Trade Rivalry in the Middle East in the Interwar Period (London: Ithaca Press)

Shoman, A. 1974
The Indomitable Arab: The Life and Times of Abdullah Shoman (1890-1974), Founder of the Arab Bank (London: Third World Centre)

Shryock, A, 1990 (?)
Final Report on Research in Jordan (Unpublished Ms)

Shwadran, B. 1959
Jordan: A State of Tension (New York: Council on Middle Eastern Affairs Press)

Sinai, A. & Pollock, A. (eds) 1977
The Hashemite Kingdom of Jordan: A Handbook (New York: American Academic Association for Peace in the Middle East)

Sluglett, P. & Farouk-Sluglett, M. 1984
'The Application of the 1858 Land Code in Greater Syria: Some Preliminary Observations', in Khalidi 1984: 409-421

Spencer, W. 1962
Political Evolution in the Middle East (Philadelphia & New York: J.P. Winnicott & Co)

The Statist 1928
'The New Currency in Palestine', The Statist, CXII, November 3rd, 648-649

Sykes, C. 1965
Crossroads to Israel (London: Collins)

Stewart, M. 1972 (2nd Edition)
Keynes and After (Harmondsworth: Penguin Books)

Tell, T. 1991
'Nomads, Peasants and the State in East Jordan: The Politics of Rural Policy, 1920-1980' (Unpublished Conference Paper)

The Times, November 28th 1935

The Times, June 24th 1944

Toni, Y.T. & Mousa, S. 1973
Jordan: Land and People (Amman: Ministry of Information and Culture)

Toukan, B. 1944
'TransJordan: Past, Present, and Future', Journal of the Royal Central Asia Society, 31, 253-264

Towle, P. 1989
Pilots & Rebels: The Use of Air Power in Unconventional Warfare 1918-1980 (London: Brassey's)

van Valkenburg, S. 1954
'The Hashemite Kingdom of Jordan: A Study in Economic Geography', Economic Geography, 30, 102-116

Vatikiotis, P.J. 1967
Politics and the Military in Jordan (New York: Praeger Press)

Vatikiotis, P.J. 1985 (3rd Edition)
The History of Egypt (London: Weidenfeld & Nicolson)

Wagstaff, J.M. 1985
The Evolution of Middle Eastern Landscapes, An Outline to AD 1840 (London & Sydney: Croom Helm)

Walpole, G.F. 1947
'Land Problems in TransJordan' Journal of the Royal Central Asia Society 34, 45-54

Warriner, D. 1944
'Land Problems in the Fertile Crescent', in Issawi 1966: 72-78

Wecht, D.V. 1992
'Jordan: Confronting the Reality", Midstream XXXVIII, 1, (January) 2-3

Willimott, S.G., Gilchrist-Shirlaw, D.W., Smith, R.A., & Birch, B.P. 1963
The Wadi el Hasa Survey (University of Durham, Department of Geography)

Willimott, S.G., Birch, B.P., McKee, R.F., Atkinson, K., & Nimry, B.S, 1964
Conservation Survey of the Southern Highlands of Jordan (University of Jordan, Department of Geography)

Willimott, S.G., Birch, B.P., Atkinson, K., & McKee, R.F. 1965
Land Classification at Wadi Qatrana and Wadi Sultani, Jordan (Final Report) (London: Ministry of Overseas Development

Wilson, M.C. 1986
Review of Uriel Dann: 'Studies in the History of TransJordan, 1921-1949', in International Journal of Middle Eastern Studies, 18, 230-232

Wilson, M. C. 1987
King Abdullah, Britain and the Making of Jordan (Cambridge: Cambridge University Press)

Wilson, R. (ed) 1991
Politics and the Economy in Jordan (London: Routledge)

Woods, H.C. 1925
'TransJordan Today' Contemporary Review, CXXVII, 313-321

"Xenophon" 1924
'TransJordania's National Status', Current History, 7, 624-628

Yapp, M.E. 1987
The Making of the Modern Near East, 1792-1923 (London: Longman)

Yapp, M.E. 1991
The Near East Since the First World War (London: Longman)