The growth and functions of Tripoli, Libya

Khuga, Mahmud Ali

THE GROWTH AND FUNCTIONS OF TRIPOLI, LIBYA

BY

MAHMUD ALI KHUGA, B A , M Litt

A Thesis Submitted for the Degree of
Doctor of Philosophy in the University
of Durham, June, 1969

PREFACE

The study of towns in all developing countries is of vital importance to the understanding of the process of the urban growth and of the functions of these towns and cities Rapid urban growth, the impact of rural in-migration, together with the emergence of new industries and other economic and social forces have created certain urban and planning problems within each city

Tripoli as an ex-colonial and pre-industrial city is experiencing rapid urban growth and many urban problems associated with the recent oil development The writer began to be interested in the urban study of Tripoli in 1964, and has continued his field work during a period of four years His research is based therefore largely on field work and his personal observations on the city's urban development since the Italian rule

A word is necessary to explain usage of certain terms The writer has used the expression the "Madina" to indicate the name of the Old Town and the "Menshia" to indicate the new Tripoli outside of the walled town The writer has used the word "Suk" to indicate the traditional market, "Shara" to indicate the name of a street or a residential quarter and

ABSTRACT

Tripoli is the western capital of Libya and is the largest urban centre in the whole country. The old city has evolved since Phoenician times, but grew gradually during the Roman and the Arab rules. It reached its ultimate stage of urban development at the end of the Ottoman rule, when the walled town of Tripoli was a fully built-up area. The urban development of new Tripoli was initiated during the Italian rule when the central business district and part of the middle zone were developed for commercial and residential uses. After the Independence of the country (1951) and recent oil development, the city began to experience a vast and rapid growth owing to various economic and social forces. Between 1954 and 1964 it nearly doubled in population partly through in-migration and partly through natural increase.

Tripoli has important political and economic functions. The first is derived from the fact that the city is the western capital and the administrative centre of the Muqataa of Tripoli. The economic function is stronger than the political one, the growth of the shopping centre and central business district, together with the emergence of various industries within the city, are its most striking features. As a result of its growth, the city has begun to experience serious problems of transportation and traffic flow, shortage of housing, rise of rents, the emergence of the Shanty Town and other serious urban problems.

Thus city planning and municipal programmes are of crucial importance to the city, in order to cope with the rapid growth of the population and expansion of housing development as well as to create better urban facilities and amenities.

"Muqataa" to indicate the province Elsewhere he has avoided many Libyan expressions in certain places in order to make the thesis clearer in English

In conclusion, I wish to record my grateful acknowledgment to Professor W B Fisher who accepted me in his Department as a post-graduate research student I am greatly indebted to Professor J I Clarke for his generous supervision, encouragement and useful criticism

I wish also to thank all high officials and civil servants in Libya who supplied me with reports, statistics and valuable information during my field work in Tripoli I would like to record my gratitude to the Libyan University and the Ministry of Education for offering me the scholarship My thanks are also extended to other research students who gave me every kind of help

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INTRODUCTION

The characteristics of urban growth in developing countries are rather different from those in developed countries Urban growth in developing countries was accelerated by political and colonial forces, whereas in the developed countries of Europe and North America, it was more piecemeal and came as a consequence of historical, economic and industrial factors Although the historical growth of cities in the developing countries is of some importance, their rapid growth has been largely a consequence of the impact of European colonization and recent economic change

The impact of colonial rule on urban growth is exemplified in all major cities and towns of North West Africa such as Tunis, Bone, Algiers, Blida, Oran, Rabat, Marrakesh and Casablanca The impact of rapid economic growth is typified in the modern cities of Riyadh in Saudi Arabia, Kuwait, Bahrein and Abu Dhabi, which have emerged largely as a result of the discoveries and production of oil.

Tripoli, as one of the ex-colonial cities now greatly influenced by an oil boom, combines both features The

Italian colonization, and recent developments in the oil industry, have had a profound impact on the urban development and expansion of the built-up area in many directions This has resulted in a changed pattern of land use in the city. Therefore the city's historical development and its recent urban growth are of crucial importance to the understanding of the structure of present-day Tripoli and its new functions.

The theory of urban development most applicable to the urban growth of Tripoli is that put forward by E W Burgess in 1923(1) and which has become known as the "Zonal or Concentric Theory " The model of Burgess is based upon the notion that the development of a city takes place from its central area, to form a series of concentric zones around the core of the central business district The theory has direct application to Tripoli as can be seen from the semi-circular development of the city Here the inner zone is the ancient part of the city which developed during the Arab and Ottoman rules The central business district is located between the inner and the middle zones, and developed partly during the Ottoman rule and partly during the Italian era (Fig 9.2). The core of the central business district is surrounded by a transitional zone to the north and the south, occupied by older traditional houses which are either in process of being taken over for offices and shops or being sub-divided to form smaller dwelling units This transitional zone is a residential area for working class people and in-migrants who are more attracted to live within this zone due to cheap rents and easy accessibility to their work-places The residential areas of the middle and outer zones are inhabited largely by middle and upper income groups.

In short, owing to the fact that Tripoli is located on a headland facing the Mediterranean, the city's urban development has taken place towards the south, east and west. Therefore the urban development can be represented by a semi-circle comparable with the Burgess model However, the model has more relevance when it is applied to the arrangement and location of the industrial areas of Tripoli, which are located in three zones the central business district, the middle zone and the outer zone By contrast, the "Sector Theory" put forward by Homer Hoyt[2] can better be applied to explain the location of the industrial areas, particularly those which lie within the middle and outer zones of the city

SITUATION AND HISTORY

Tripoli is the western capital of Libya and the largest city in the country It is situated at the top of the Jefara plain of Tripolitania on the Mediterranean sea, between Homs to the west and Azizia to the south. The Suk el Juma district constitutes the immediate metropolitan region of Tripoli surrounding the city in three directions (Fig.0.1) Together

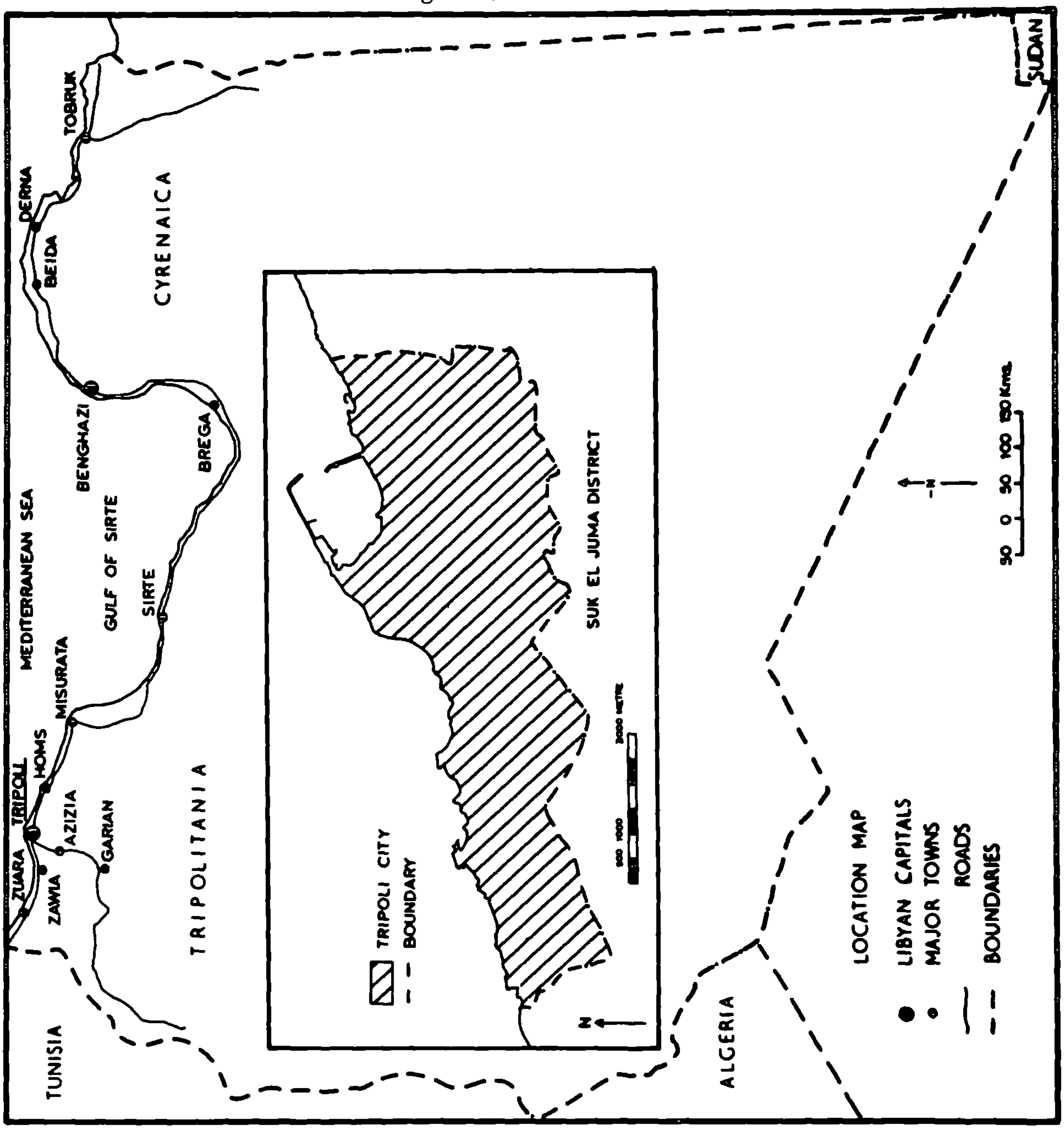

MEDITERRANEAN SEA
GULF OF SIRTE
TUNISIA
ALGERIA
SUDAN
TRIPOLITANIA
CYRENAICA
ZUARA
ZAWIA
TRIPOLI
AZIZIA
GARIAN
HOMS
MISURATA
SIRTE
BREGA
BENGHAZI
BEIDA
DERNA
TOBRUK
TRIPOLI CITY
BOUNDARY
SUK EL JUMA DISTRICT
LOCATION MAP
LIBYAN CAPITALS
MAJOR TOWNS
ROADS
BOUNDARIES
50 0 50 100 150 Kms.

Figure 0 1

the city and its metropolitan region occupy 11,864.7 hectares, 3,446 8 of which or 29 0 per cent are occupied by the city About 2,066 3 hectares of the city are built-up area (59.9 per cent), the rest being open space and agricultural land

The urban growth of Tripoli began as early as Phoenician times The Phoenicians had chosen the present site of Tripoli, which is now occupied by the Old Town, as a commercial centre for their trading activities between Libya and the Eastern Mediterranean countries. Later, the commercial settlement grew and attracted some in-migrants from the rural areas who settled around and within the new settlement of Marca Uiat The town continued its urban expansion during Roman rule when its name was changed to Oea and then to Tripoli This growth was maintained during the Arab and Ottoman rules By the end of the 19th century, the Old Town of Tripoli was a fully built-up area surrounded by a wall

When the Italians occupied Libya in 1911, they built a new town outside the walls of the Old Town. This urban development covered the whole of the present day central business district and part of the middle zone The urban growth of the city continued after Independence in 1951 As a result, new residential and industrial areas were created, and followed by urban encroachment into the middle and outer zones Thus the new built-up areas spread rapidly in many directions particularly towards the south-east and west.

Some urban expansion took place to the south of Tripoli within the central part of the middle zone The flooding of the Wadi Mejenin has restricted the expansion of the built-up area further

At present, the urban expansion continues in the outer zone However, the existence of agricultural lands within the eastern part of the middle zone restricts the expansion of the residential areas.

FUNCTION

The present economic functions of Tripoli are more important than its political functions This is partly because Tripoli is the largest regional shopping and service centre in Libya, attracting customers not only from Tripolitania but also from Fezzan and Cyrenaica. Libyan business offices are highly concentrated in Tripoli, and about two-thirds of Libyan industrial firms are located within the city, producing various kinds of foodstuffs, textiles, bricks and other goods.

The port of Tripoli plays an important role in the commercial and industrial life of the city It is the largest and best equipped port in the country with modern handling and storage facilities Moreover, the port is the only outlet of Tripolitania and Fezzan to the outside world

The hinterland of Tripoli includes the whole Tripolitanian region (the plain, the Jebel regions and the Ghibla zone) This springs from the fact that the region supplies the city with various agricultural and animal products In return, the city provides all commercial and industrial products, medical treatment, entertainment, newspapers and other services for the whole Tripolitanian region As a result Tripoli is the centre of a network of roads and transport facilities of the whole region.

The population of Tripoli is of great significance to the growth and functioning of Tripoli, because the population forms the economic force of the city in terms of working population and in terms of enhancing the demand for goods and housing The population of Tripoli numbered 212,577 or 13 5 per cent of the total population of Libya in 1964, but by June 1968, it had reached 250,062 (Libyans 213,755, Italians 24,972, Jews 6,389 and aliens 4,946)

The urban growth of Tripoli together with its growing economic functions have created a considerable change in the pattern of land uses For example, the expansion in housing and the emergence of new industries have created a demand for land for urban uses As a result, the value of land rose considerably not only within the central business district, but also within the middle and outer zones

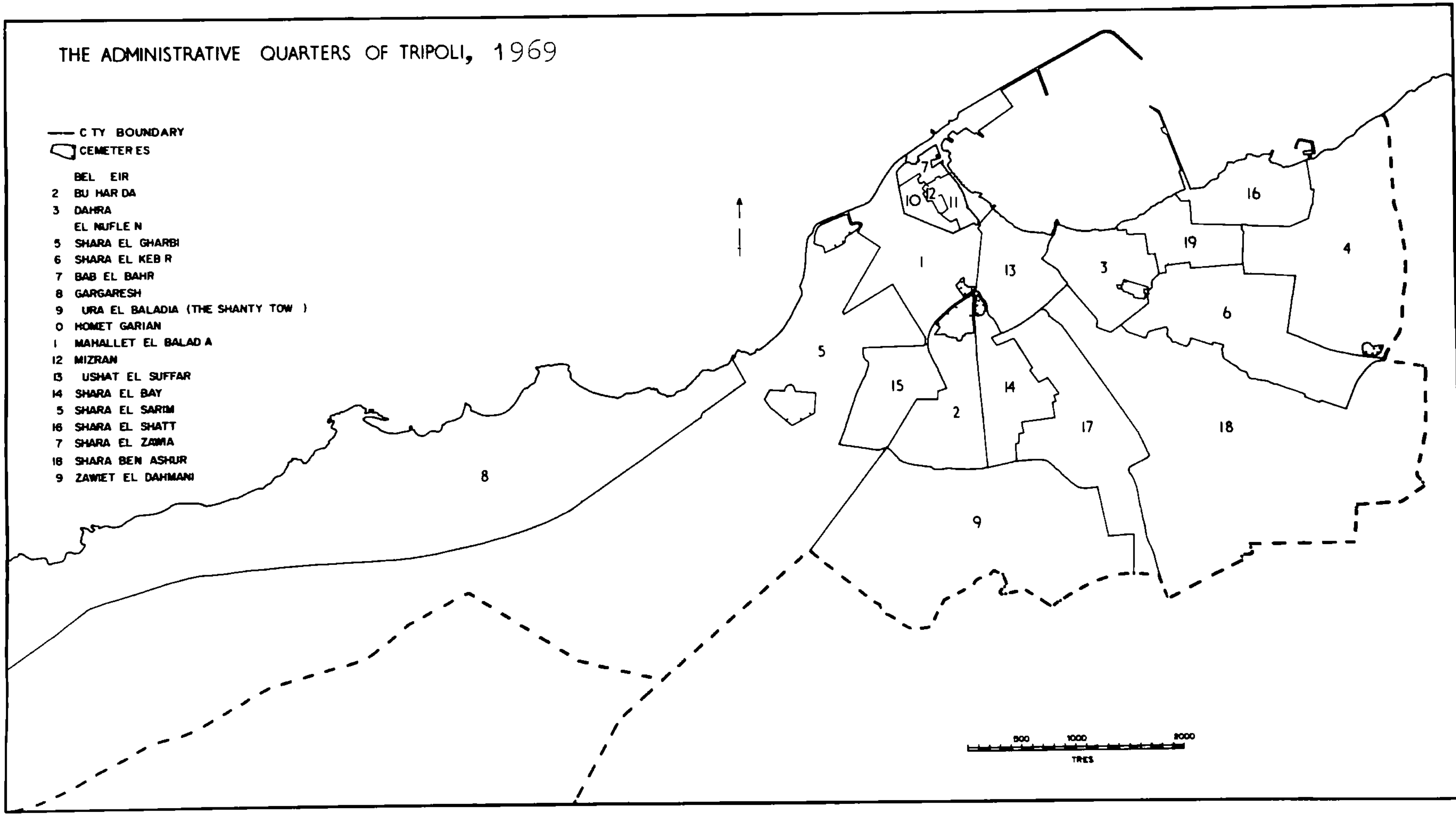
Rapid urban growth and the increasing number of vehicles have created various traffic problems, because of inadequate road planning City planning is therefore of vital importance for the control of the urban growth and land use and is necessary for the regulation and co-ordination of the various functions of the city.

It is interesting to note that Tripoli city comprises nineteen administrative quarters (Fig.0.2) the Old Town has four quarters (Homet el Baladia, Homet Garian, Bab el Bahr and Kushat el Suffar), and the remainder are found within the Menshia area or the new Tripoli This administrative division was devised by the Ottoman Administration (1551-1911) and recognized by the Italian Government (1911-1943) and later by the Libyan Government It has some geographical significance since the name of each quarter was derived from the name of the residential area. Although this division has certain disadvantages in terms of recent urban development, the local authorities still maintain it for census and municipal purposes The writer believes that the present administrative quarters could be usefully replaced by a system based on geographical areas (i.e North, South, West and East).

A word must be said about the Libyan Government's announcement on the 18th January, 1968 concerning the annexation of the Suk el Juma district to Tripoli city, which meant that the city gained more than 8,000 hectares (Fig.0.1). This new annexation will not fall within the scope of the present thesis which is based on the city prior to this extension

The thesis is divided into three parts the first part

Figure 0 2


THE ADMINISTRATIVE QUARTERS OF TRIPOLI, 1969
C TY BOUNDARY
CEMETER ES
BEL EIR
2 BU HAR DA
3 DAHRA
EL NUFLE N
5 SHARA EL GHARBI
6 SHARA EL KEB R
7 BAB EL BAHR
8 GARGARESH
9 URA EL BALADIA (THE SHANTY TOW)
0 HOMET GARIAN
I MAHALLET EL BALAD A
12 MIZRAN
13 USHAT EL SUFFAR
14 SHARA EL BAY
5 SHARA EL SARIM
16 SHARA EL SHATT
7 SHARA EL ZAWIA
18 SHARA BEN ASHUR
9 ZAWIET EL DAHMANI
500
1000
2000
TRES

deals with the location and evolution of the city, the second part analyses the city's urban functions, its urban zones and aspects of its political, commercial, industrial housing and population, while the third part examines city planning and municipal programmes which were initiated in 1963

Comprehensive and detailed information on many aspects on the urban geography of Tripoli (e g housing, commercial areas, industrial zones, land uses, transport and town planning) is either lacking or too inadequate to provide a useful basis for analysis Therefore the writer had to rely heavily on field work and sample surveys in order to deal with the problem of the paucity of detailed published data His knowledge of the city and the fact that he personally witnessed some historical and more recent urban developments proved of great value Such knowledge and personal observations enabled him to understand some of the socio-economic forces underlying the growth and urban functions of Tripoli

References

1 Park, R E , Burgess, E W , and McKenzie, The City (Chicago, 1925), pp 47-62.

2 Hoyt, H., The Structure and Growth of Residential Neighbourhoods in American Cities (Washington, 1939)

CHAPTER I

ELEMENTS OF LOCATION

Tripoli, the western capital of Libya, is situated on the Mediterranean coast of North Africa at Lat 33^{o}N and 13 10^{o}E It is located at the extreme northern point of the Jefara plain and in a central position between Homs (121 kms to the east) and Zuara (113 kms to the west) (Fig 0 1).

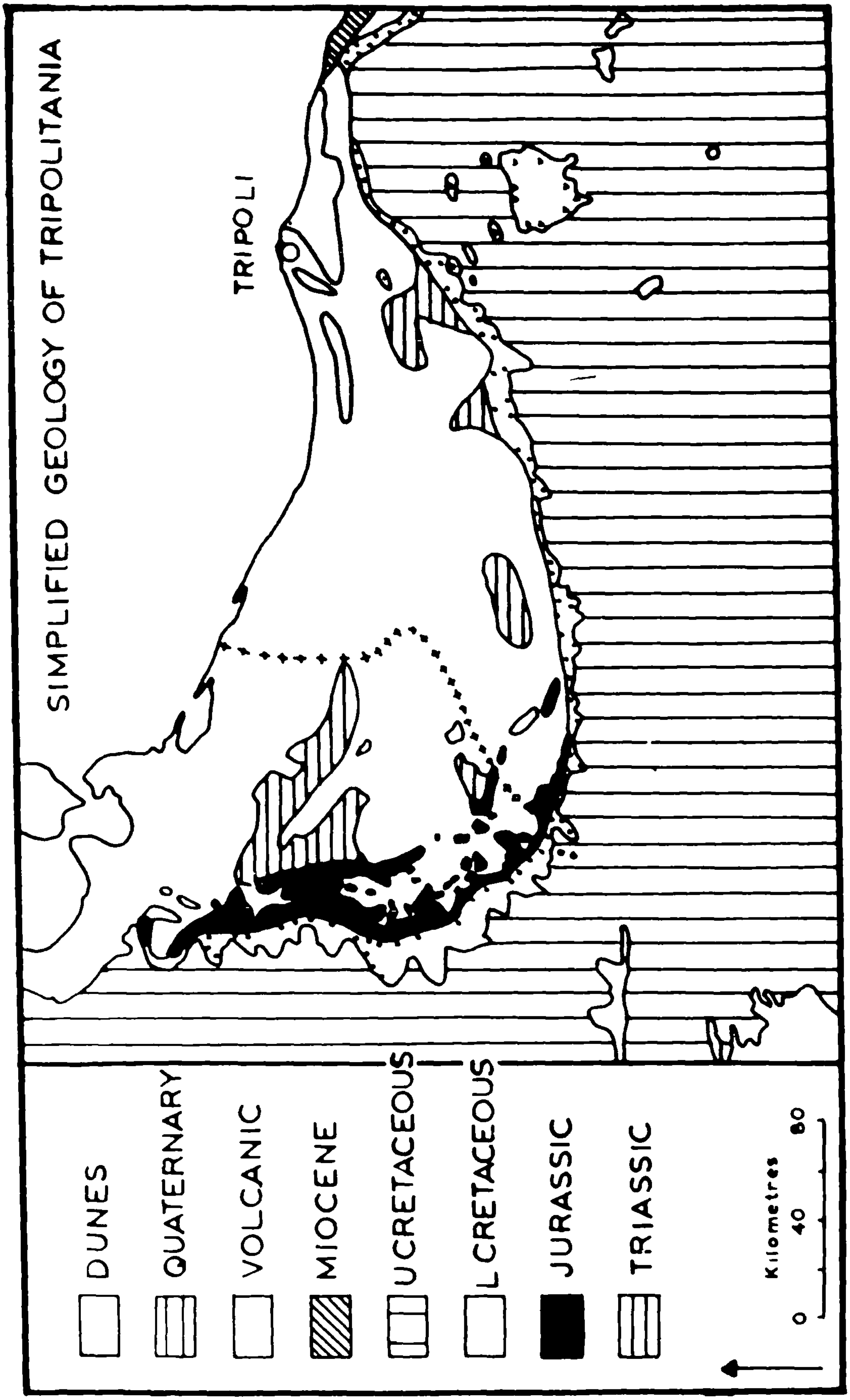
1 1 GEOLOGY

The site of Tripoli occupies a small section of the vast plain of the Jefara, which is bounded to the south by Tripolitanian Jebels Both the plain and the Jebels formed part of an extensive dome-shaped anticline that extended from Tabarka in Tunisia to Homs in Tripolitania The northern limb of the anticline was down faulted in the late Cretaceous and was subsequently covered by Tertiary and Quaternary deposits which form now the Jefara plain (1) The plain can be divided into two zones the outer zone which occupies the whole coastal zone of the Jefara and is composed mainly of Quaternary series and the inner zone which comprises the rest of the Jefara and made up mainly of Triassic sediments (Fig 1 1)

The geological formations of the outer zone are continental deposits of aeolian materials, alluvium, conglomerates, gravels and sands Much of the site of Tripoli and its region is composed of continental deposits, particularly sands, while the alluvium of the Wadi Mejenen covers a considerable area of the western part of the city In the extreme west of the site of Tripoli at Gargaresh quarter, Miocene limestone rocks are exposed extensively, white in colour and rich in fossils They are of great economic value for the city of Tripoli, for most of the Gargaresh quarries have been used intensively by the inhabitants of the city since Roman times In fact all the houses which were built within the Old Town and the Menshia used this limestone for construction The economic value of the limestone is further enhanced by its physical characteristics which make it very resistant to the humidity and aridity of the local climate

The soils of the site of Tripoli have been derived from Quaternary deposits and vary in type and distribution Chalky soil is found within the site of the Old Town, while sandy soil exists in all agricultural lands in many quarters e g El Nuflein, Zawiet el Dahmani, Shara Ben Ashur, Shara el Kebir, Shara el Shatt and Gargaresh These sandy soils range in colour from grey buff to orange brown.(2) They are

Figure 1 1


SIMPLIFIED GEOLOGY OF TRIPOLITANIA
TRIPOLI
DUNES
QUATERNARY
VOLCANIC
MIOCENE
U CRETACEOUS
L CRETACEOUS
JURASSIC
TRIASSIC
Kilometres
0
40
80

potentially good for agriculture, particularly around the Wadi Mejenin where alluvium accumulates on the top of the sand due to the overflowing of the Wadi Mejenin

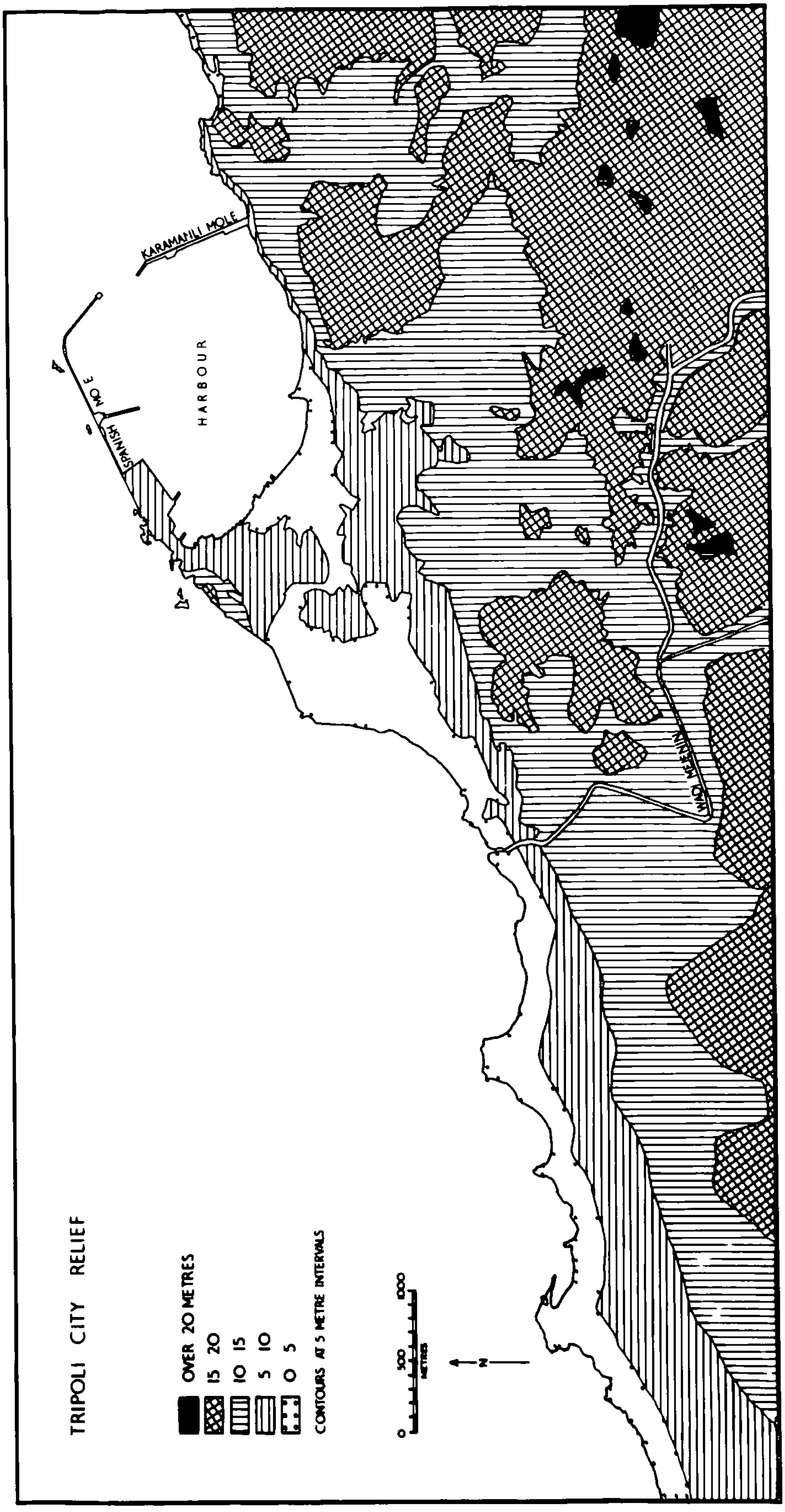
1 2 TOPOGRAPHICAL FEATURES

The site of Tripoli has little variation in its topographical features The height of land varies from 5 m to 20 m above sea level The height part (20 m.) is found to the south of the site of the city boundary and is covered by mobile and immobile sand dunes Other higher land is found at the extreme north-western edge of the site of the Old Town and in the eastern parts of the new city within the Dahra and part of the Shara el Kebir and Zawiet el Dahmani quarters The central and southern parts of the city range from 5-10 m On both edges of the Wadi Mejenin, the height is 15 m (Fig 1 2)

These variations in altitude within the site of Tripoli had an effect on its drainage system and subsequently on its residential development For example, the highest lands with good drainage into the sea are the best residential areas, while the lowest ones, in the Shara el Kebir, Mizran, Belkheir quarters, have bad drainage and slums

The Wadi Mejenin is an important topographical feature It is the largest wadi in the Jefara which reaches the sea coast It descends from the Jebel Garian at an altitude of 750 metres above sea level crossing the Quaternary deposits of the Jefara and runs for more than 70 kilometres before

Figure 1 2


TRIPOLI CITY RELIEF
OVER 20 METRES
15 20
10 15
5 10
0 5
CONTOURS AT 5 METRE INTERVALS
0
500
1000
METRES
N
HARBOUR
KARAMANLI MOLE
SPANISH MOLE
WADI MEJENIN

discharging its water into the sea (Fig 1 3) Two branches of this wadi cross the city's southern boundary and run for about 3 kms before coming together and forming one course which runs for four kilometres to the west of the central business district at Gargaresh gate (Plate 1 1) Thus the wadi course divides the Giorgiompopoli and Gargaresh quarters from the central business district The wadi course has restricted the expansion of the built-up area of Tripoli southwards particularly the area which is located between the tributaries of the wadi

Here no urban development has taken place owing to the danger of wadi floods during high rainfall years For example, in 1945, 1958, 1962 and 1966 a considerable number of houses were flooded in particular in many of the slum areas of Ben Gashir and Accara gates to the south of the city The danger remained though the local authority deepened the wadi course in an attempt to avoid overflooding

The coastal area of the site of Tripoli bounds the whole of the northern sectors of the city for 11 kms , the western sectors for 7 kms and the eastern for 5 kms The port and harbour owe their existence to the coast line which shelters the port from the north-west winds and creates a natural harbour which subsequently became artificially extended

The western coastal area has minor projections towards sea, with interesting beaches All along the western coast are broad and sandy beaches convenient for swimming The

Figure 1 3

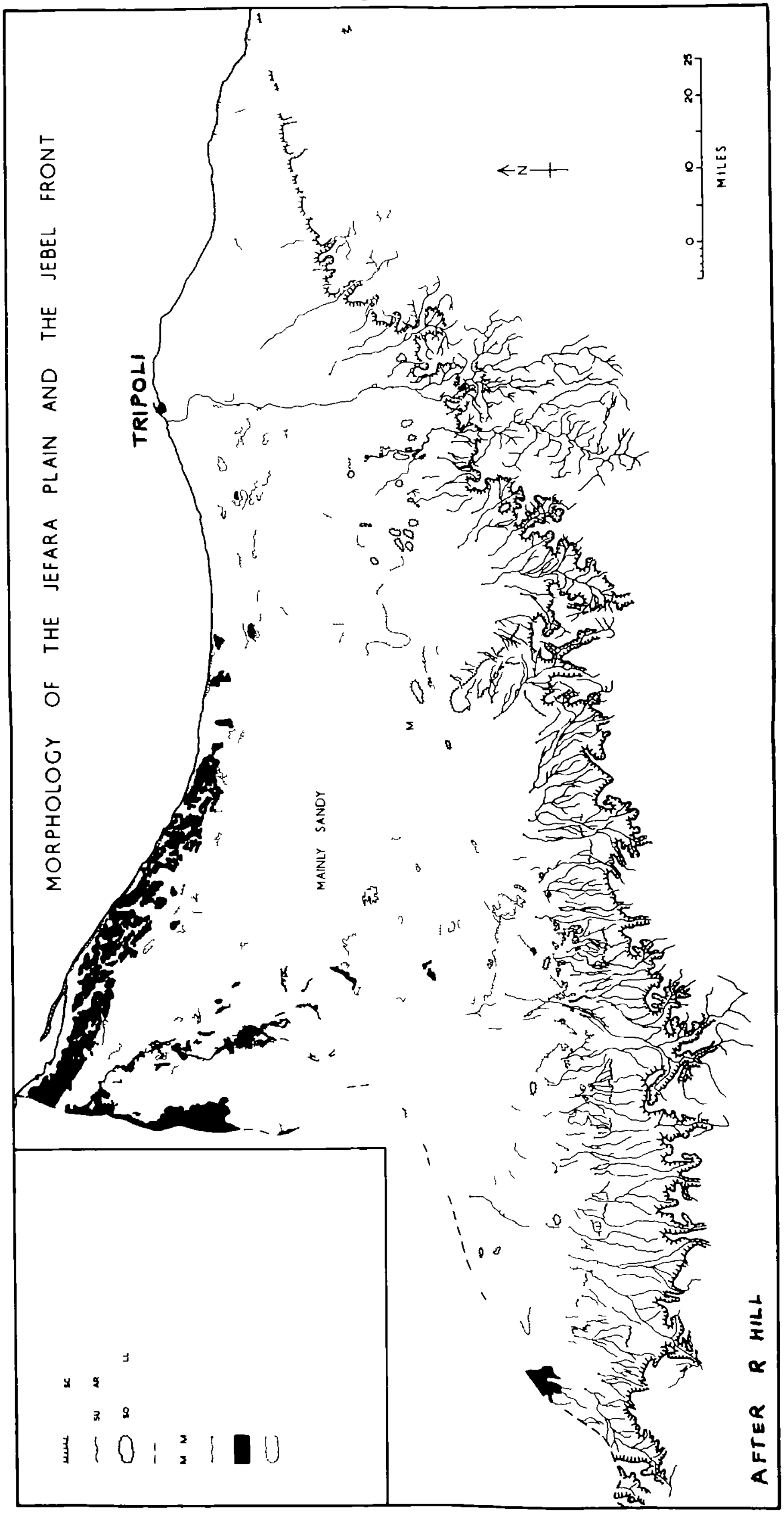

MORPHOLOGY OF THE JEFARA PLAIN AND THE JEBEL FRONT
TRIPOLI
MAINLY SANDY
N
0
10
20
25
MILES
AFTER R HILL

Plate 1 1 Wadi Mejenin's bed near Gargaresh gate.

eastern coastal strip is straighter, narrower and rockier than the western, and in some places the rocks shelve steeply into the sea, making it unsuitable for bathing and other beach activities

Sand dunes are found to the south and south-west of the site of Tripoli They occupy extensive areas in Accara, Gurgi and Sidi Mesri The Italians fixed the mobile sands of Sidi Mesri by heavy afforestation, in particular with eucalyptus species, and developed the sandy areas for either agricultural or urban use Afforestation is also being undertaken now in the Accara and Gurgi areas These sandy areas restricted the expansion of the built-up area southwards, but afforestation by the Ministry of Agriculture has reduced the danger of the mobile sands and has therefore made it possible for urban development to take place in these areas

In sum, the topography of the site of Tripoli has had an effect on the expansion of the built-up areas especially during the Italian occupation, when urban development took place on better drained areas, that is on the higher land, also the Italians avoided further development near the Wadi Mejenin After independence (1951) and oil discoveries in Libya (1959), most of the urban development took place in the west, in the well drained areas in Gurgi, Giorgimpopoli and Gargaresh near the coast Proximity to the sea and the existence of good beaches have contributed greatly to the development of this sector of Tripoli's site

1 3 CLIMATE

The climate of the whole coastal zone of Libya falls into the second group, 'Subtropical,' of De Martone's 'Mediterranean' classification, while he places the rest of Libya within the fifth group 'Desert '[3] Koppen considered the coastal zone of Tripolitania and the Jebel el Akhdar in Cyrenaica to fall within the 'Oliveklima' which was the sixth of the groups into which he subdivided the Mediterranean region [4] But Fantoli went further in his subdivision of the climate of Tripolitania He identified five climatic zones (Fig 1 4) [5]

(a) Maritime

(b) Steppe

(c) High plain (Jebel)

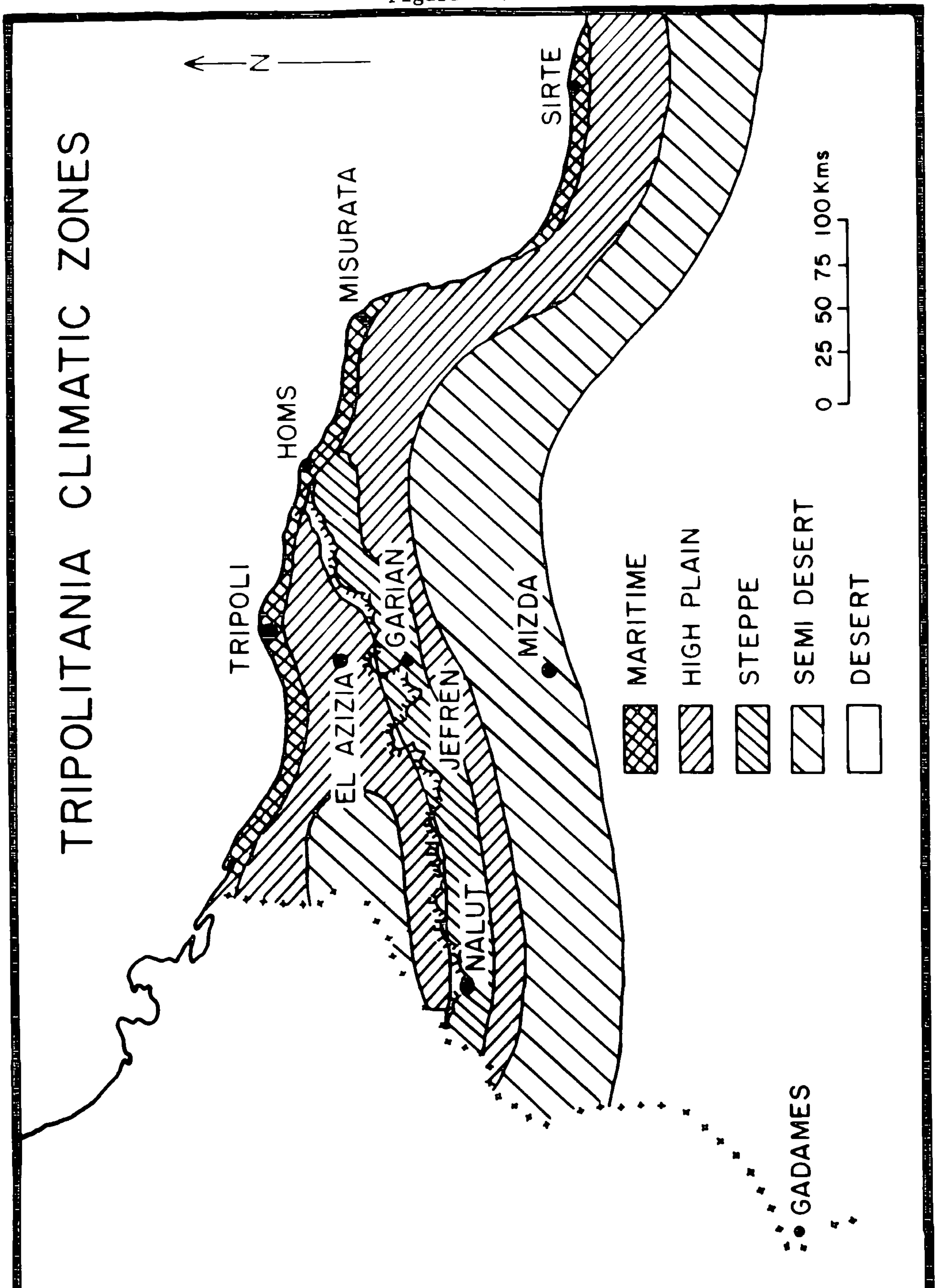
(d) Pre-desert

(e) Desert

The site of Tripoli lies within Fantoli's 'maritime' zone There are two major influences on the climate of the city the sea and the Sahara During the winter months, Tripoli is subject to the maritime influences from the north-west, but during the summer, the Sahara region to the south exercises a dominant influence on the climate

In winter (October-March) the Mediterranean regions in general are areas of low pressure between the semi-permanent Azores anticyclone and the continental high pressure of Eastern Europe and Asia Air is drawn into the region from widely separate areas e g Polar maritime air from Europe and

Figure 1 4


TRIPOLITANIA CLIMATIC ZONES
N
SIRTE
MISURATA
HOMS
TRIPOLI
EL AZIZIA
GARIAN
JEFREN
MIZDA
NALUT
GADAMES
MARITIME
HIGH PLAIN
STEPPE
SEMI DESERT
DESERT
0 25 50 75 100 Kms

the North Atlantic Ocean and Tropical continental air from the Sahara Temperature ranges are marked between the Tropical and Polar air masses, and Fronts often exist in the western Mediterranean and subsequently move eastwards However, northern Tripolitania in general and Tripoli in particular lie to the south of the main tracks of these depressions, and are consequently affected mainly by rainfall which is somewhat unreliable in distribution and amount

In summer (April-September) the circulation of air masses is less active, for the Tripolitanian coast lies on the eastern border of the semi-permanent Azores anticyclone The mean pressure over central Asia is low at this season, and north-west winds are prevalent over the Mediterranean But the contrast between the Polar and Tropical air masses are far less than in winter Settled conditions and constant wind directions are usual However, when the relatively high pressure over Cyrenaica is intensified by the southerly winds, high temperatures result in the exposed and low lying areas of northern Tripolitania Autumn and spring are brief periods of transition when weather conditions of either summer or winter may occur.

These weather conditions which recur in a similar pattern each year, are responsible for the outstanding seasonal features of the Mediterranean type of climate, i.e mild moist winters and hot dry summers with a relatively uniform annual temperature sequence (6)

Rainfall

Tripoli has the highest rainfall figures not only in the Jefara plain but in the whole of Tripolitania (Fig 1 5) This can be attributed to the following factors firstly, it lies in the path of the moisture bearing winds, secondly, its coastal situation, including its projection from the main coast line, and, thirdly, dense vegetation cover

Most of the rainfall occurs in autumn, winter and spring and accompanies depressions crossing the Tripolitanian coast from western Mediterranean In summer, there is hardly any rain at all (Fig 1 6). The mean annual rainfall of Tripoli is 368 mm. and is higher than that of Benghazi in Cyrenaica where the mean annual rainfall is 265 mm

Table 1 1 Average monthly rainfall (1879-1965) in mm (7)

J	F	M	A	M	J	J	A	S	O	N	D	Year
76 9	42 9	24 6	9 3	5 3	1 3	0 5	0 8	10.2	36 5	65 9	93.8	368

Tripoli's meteorological station has been recording rainfall since 1879 Fig 1 7 shows that there have been great fluctuations in the average yearly rainfall figures High rainfall years have had devastating effects on the city for example on the flat roofs of the traditional houses, particularly those which are located in the Old Town and other slum areas and on those roads and streets which have poor asphalted foundations or are unpaved Rain water also accumulated in

Figure 1 5

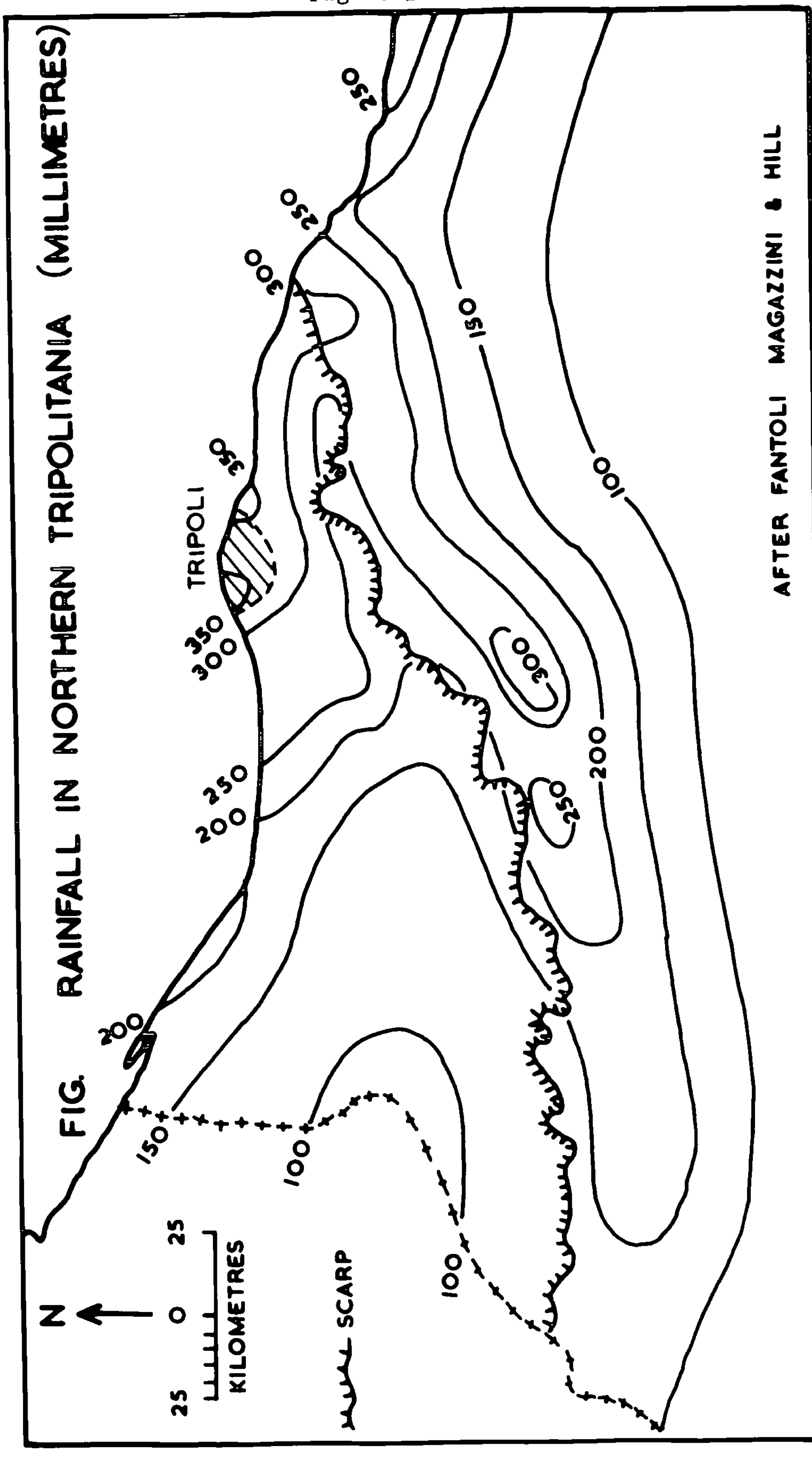
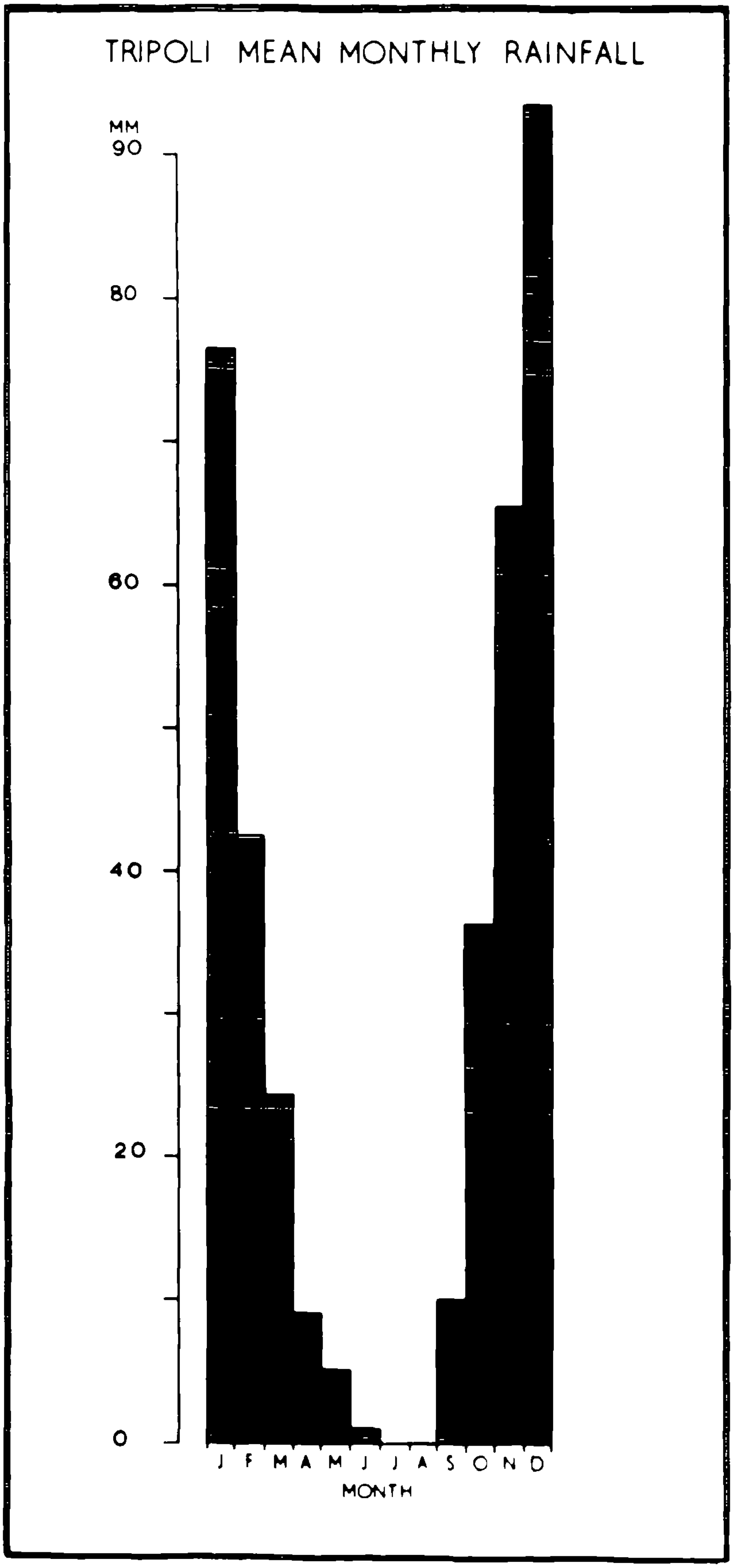


FIG. RAINFALL IN NORTHERN TRIPOLITANIA (MILLIMETRES)
TRIPOLI
N
25 0 25
KILOMETRES
SCARP
AFTER FANTOLI MAGAZZINI & HILL
100
150
200
250
300
350

Figure 1 6


TRIPOLI MEAN MONTHLY RAINFALL
MM
90
80
60
40
20
0
J F M A M J J A S O N D
MONTH

some parts of the city where drainage system was absent or deficient and caused the traffic to be impeded

Also during the high rainfall years the flow of the Wadi Mejenin from the Jebel Garian to Tripoli increased and floods which occurred endangered the built-up area of the city In 1958, two floods of 6 million m^3 occurred and lasted for 3 days, in 1962, one flood of 2 million m^3 lasted for 48 hours, and in 1966 one flood of 2 million m^3 lasted for 24 hours These wadi floods have endangered the residential areas and other urban land uses near the wadi banks

Drought years in Tripolitania occur once every four or five years and have an injurious effect on the rural people because of their dependence on rainfall for their agricultural activities (Fig 1 7) Failure of harvests force them to migrate to Tripoli seeking food and employment Consequently, the unemployment rates increase greatly within the city, endangering the economy of the city and the security of people's properties as crimes and robberies increase During such droughts the demand for goods in Tripoli's traditional markets is reduced and there is a shortage of cereals

All kinds of the commercial activities in the shopping centre are also affected

Humidity

Tripoli has lower mean annual relative humidity than Zuara to the west and Homs to the east (Tripoli 62%, Zuara 68% and Homs 69%), but it is slightly higher than Benghazi (58%).

Figure 1 7

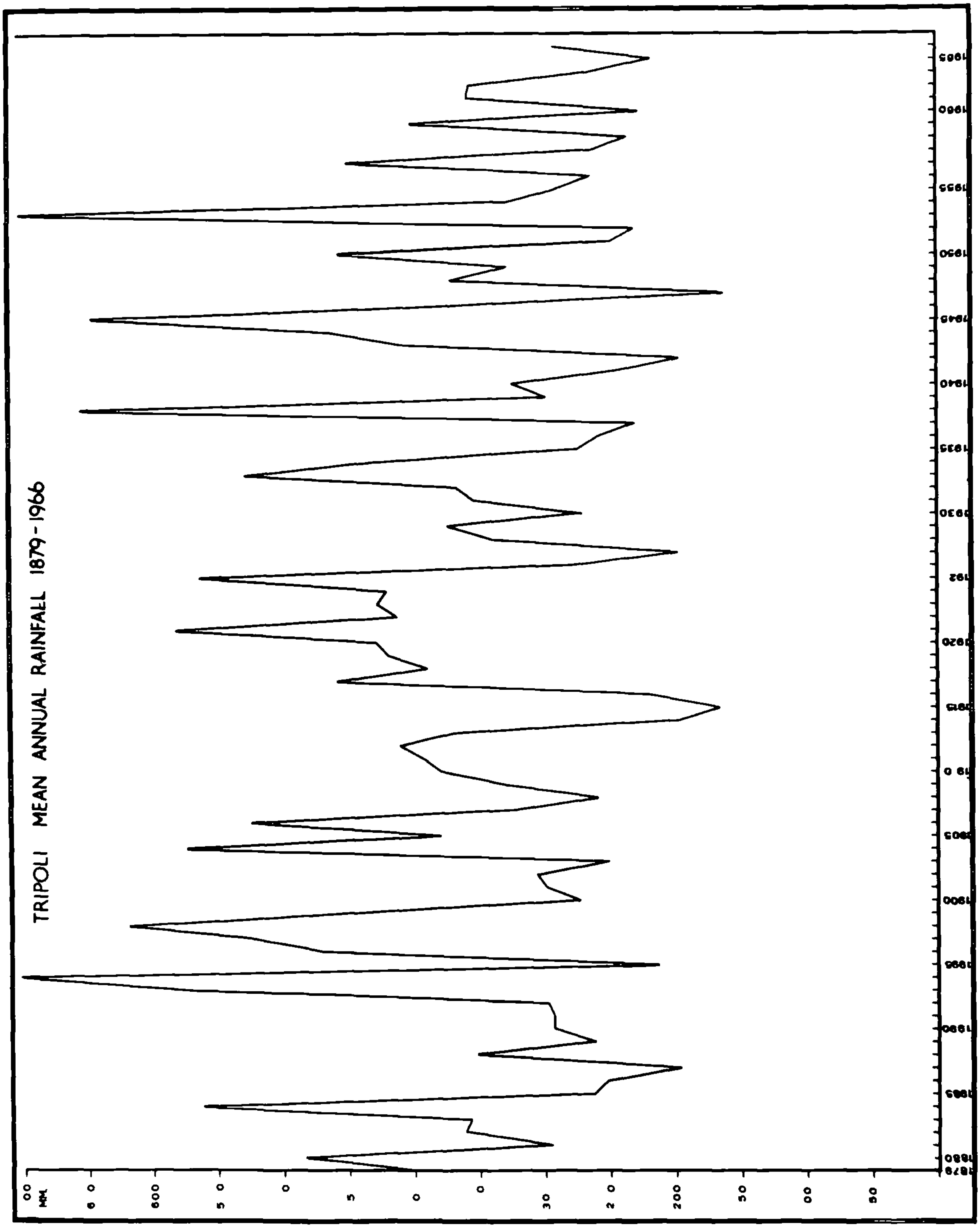
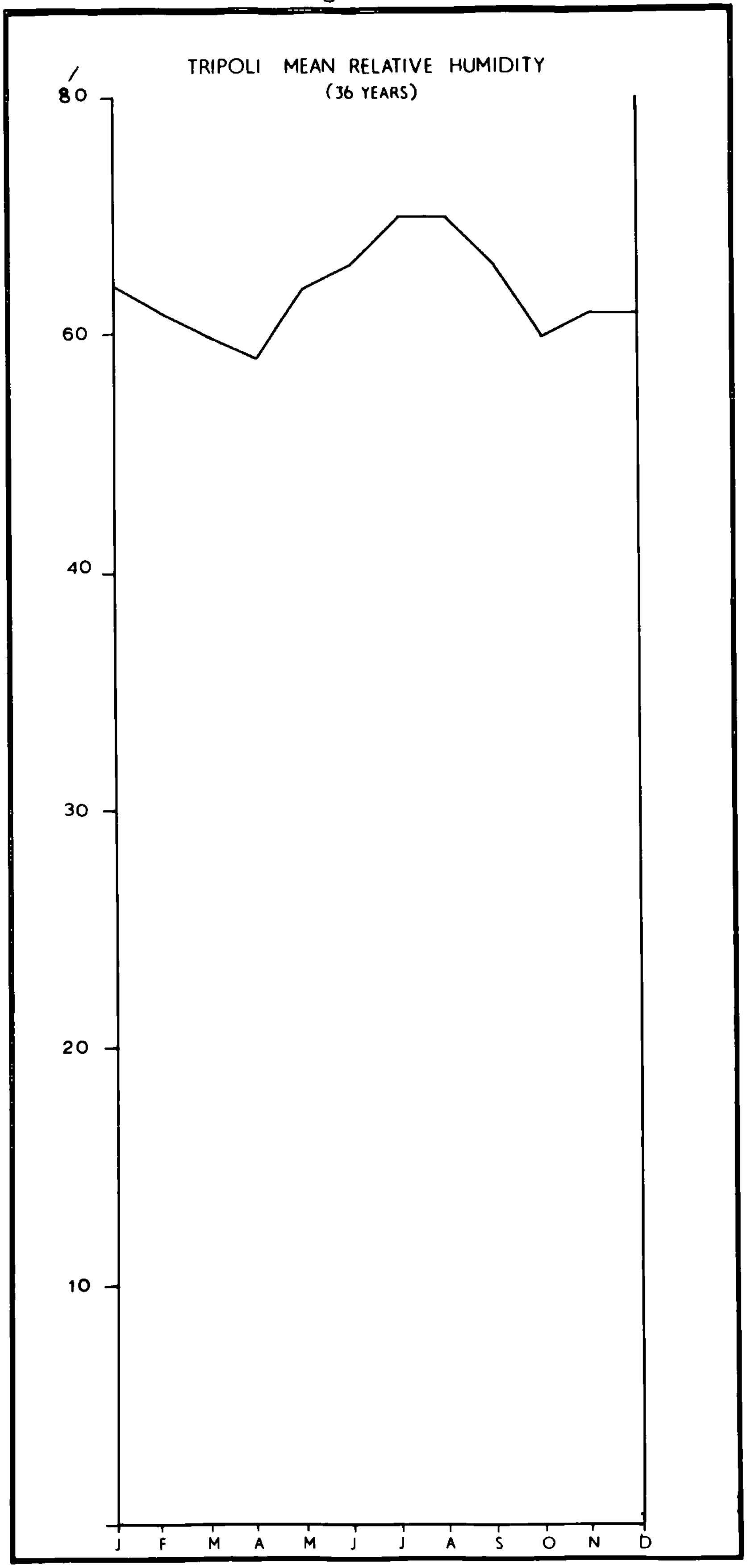


Figure 1 8


TRIPOLI MEAN RELATIVE HUMIDITY
(36 YEARS)
%
80
60
40
30
20
10
J F M A M J J A S O N D

The distribution of the mean relative humidity is as follows (8)

Table 1.2 Mean Relative Humidity (1922-1958) in %

J	F	M	A	M	J	J	A	S	O	N	D	Year
62	61	60	59	62	63	65	63	63	60	61	62	62

Table 1 2 shows that there is very little difference between the humidity figures in winter months. During April, the humidity drops owing to the effect of the hot Ghibli wind, then from May onwards, it rises gradually and reaches a maximum in August (Fig 1 8) Then high temperatures and high humidity make the city rather unbearable

Temperatures

Temperatures of the coastal zone on which Tripoli is situated, are modified by the proximity of Mediterranean sea Summer temperatures, particularly during the day, are lower than those of the rest of the Jefara plain This is related to the cooling influence of the sea, whereas in winter the relatively warm sea causes the temperatures to rise above those of the inland region of the Jefara

When comparing the temperatures of Tripoli with those of Benghazi, Tripoli's temperatures are found to be consistently lower e g' -

Table 1 3 Mean annual, mean maximum and mean minimum temperatures in Tripoli and Benghazi, 1920-1956

	Tripoli	Benghazi
Mean annual temperature	19 5°C	19 8°C
Mean maximum temperature	24 3°C	24 8°C
Mean minimum temperature	17 2°C	14 9°C

The monthly average temperatures for Tripoli show considerable variation over the months of the year (Table 1 4)

Table 1 4 Temperatures, Tripoli, 1920-1956(9)

Month	Maximum mean °C	Minimum mean	Mean	Extreme maximum	Extreme minimum
January	16.5	7.6	12 0	28 1	0 6
February	17 9	8 6	13 3	32 9	0 2
March	20 1	10 4	15 2	40.4	2 2
April	23 2	13 1	18 2	40.5	4.4
May	25.5	15 7	20.6	44 2	6 1
June	28.6	19.1	23 9	44 7	9.8
July	30 2	21 1	25 6	45.4	13 4
August	30.9	21 7	26.3	45 6	15 0
September	30.3	20 9	25 6	45 0	13.2
October	27.6	27.6	22 7	39.7	9 4
November	23 0	23 0	18 1	36.2	5 8
December	18 3	18 3	13 6	28.4	1 4

These figures show that there are great differences between summer and winter temperatures The mean maximum (between

1920 and 1956) of the hottest month (August) reached 30 9°C , while the mean maximum of the coldest month (January) is 16 5°C (Fig.1 9)

The effect of the hot Ghibli wind is to raise the temperatures during spring and summer and sometimes even in January and February when the extreme minimum temperatures occur.

In the winter months, the cloud modifies both day and night temperatures by limiting insolation during the day and preventing excessive radiation during the night

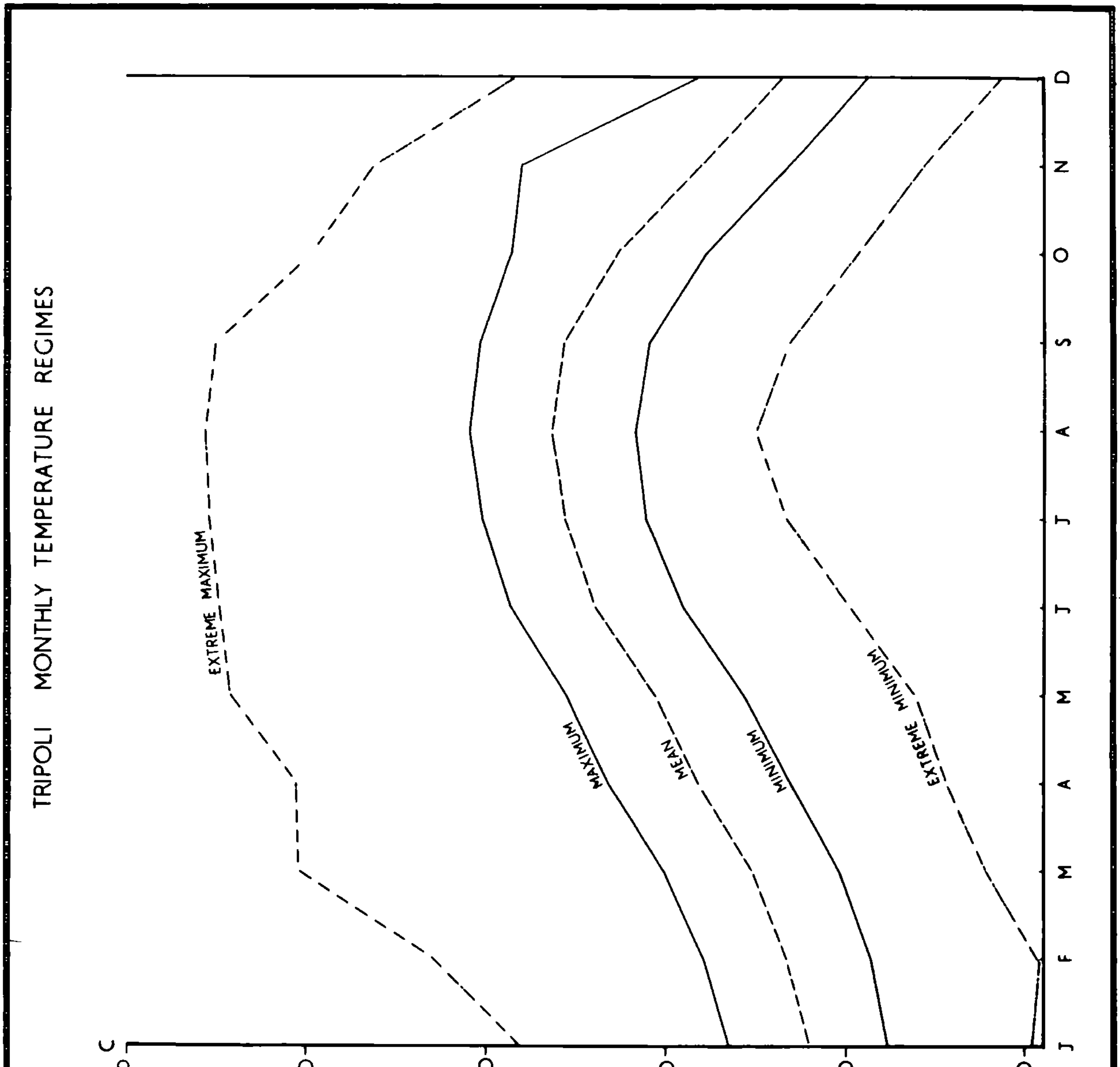
Generally speaking, the extremely high temperatures which occur during June, July, August and September have a profound effect on the business activities of the shopping centres of the city as well as on the Government offices All shops close between 1-4 p m and the official day of Government civil servants ends at 2 30 p m Since 1956, the Oil Companies and some other commercial firms have introduced air conditioning systems which enable employees to work during the afternoons Also the use of the fans is increasingly popular in shops, Government offices and private houses

Winds

The most frequent wind during the summer is the north-east wind This wind is mainly dry and fresh The north-west wind is more dominant during the winter months and is responsible for torrential rainfall.

The most important local wind is known as the Ghibli

Figure 1 9


TRIPOLI MONTHLY TEMPERATURE REGIMES
EXTREME MAXIMUM
MAXIMUM
MEAN
MINIMUM
EXTREME MINIMUM
C
50
40
30
20
10
0
J
F
M
A
M
J
J
A
S
O
N
D

This wind is responsible for variations in the climate not only in Tripolitania, but also in the whole of Libya It takes the form of a hot dry current of tropical air which comes from the south and south-west to the north across the Jebel and the Jefara plain Normally in spring it moves north over the east side of a depression from the Atlantic which moves more or less parallel to the North African coast In late spring and summer, it is likely that the Ghibli is the result of cyclonic conditions which develop over the western Sahara (10)

Table 1 5 Number of days with Ghibli winds 1960-64

Year	J	F	M	A	M	J	J	A	S	O	N	D	Total
1960	4	10	9	10	13	7	3	3	-	9	4	-	72
1961	-	-	3	9	12	3	3	1	2	3	6	8	50
1962	3	-	8	10	12	5	4	1	3	3	3	-	52
1963	9	10	9	7	2	12	5	2	5	-	8	13	82
1964	-	8	11	6	8	8	5	8	1	16	4	8	83

Source Meteorological Office, 1966

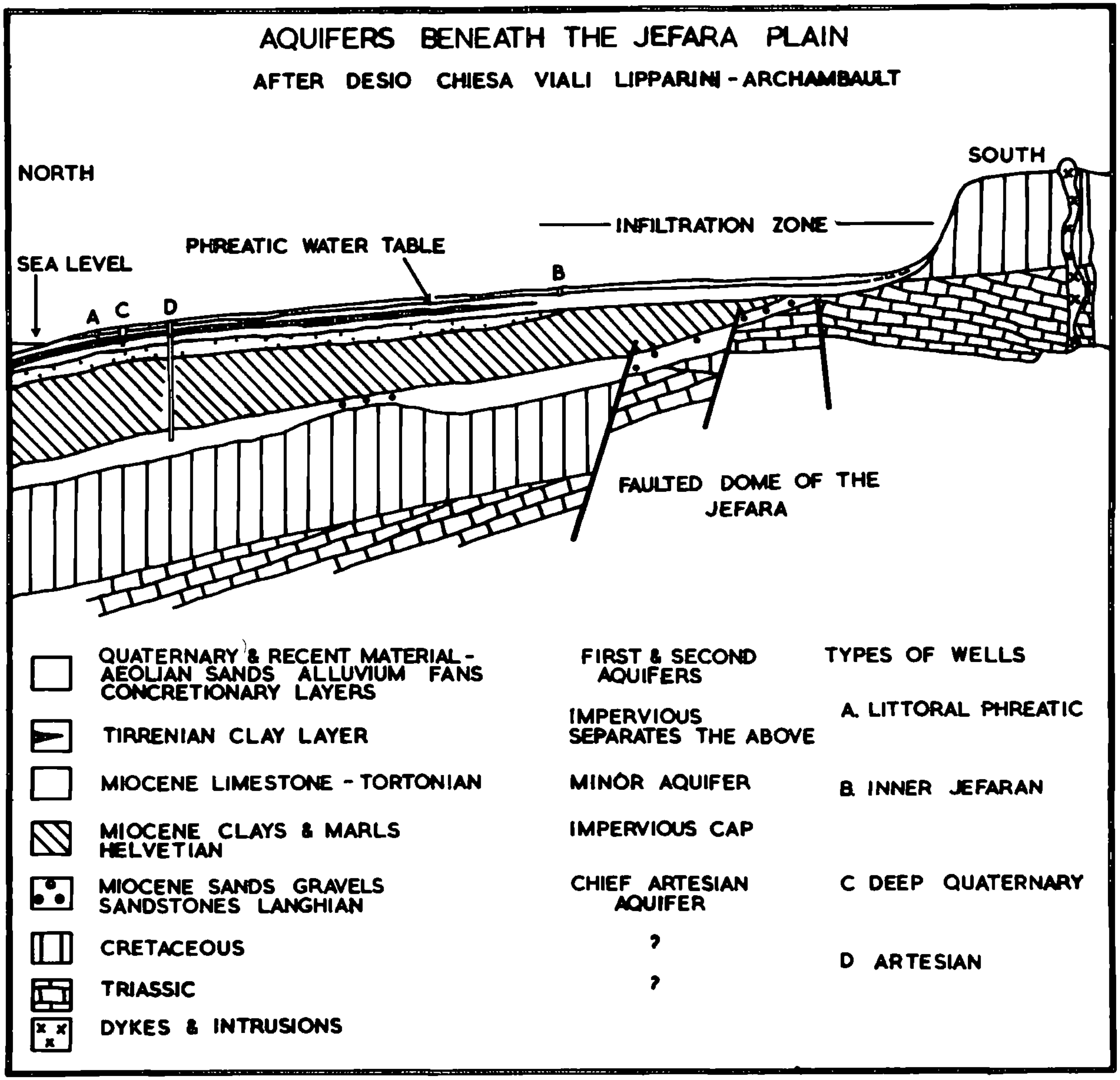
The Ghibli is responsible for a sharp reduction in atmospheric humidity and a rapid increase in temperature It can increase temperatures in Tripoli to 45°C and reduce humidity to 0-10% Its dryness can increase transpiration from plants and evaporation from the soil Moreover, the Ghibli also leads to the spread of eye disease (Trachoma) which is considered the most widespread disease among the population of Tripoli In 1964, there were 2,481 totally blind people in the city and 4,919 partially blind When the Ghiblis are strong, they move sand dunes and disperse sand The wind borne sand affects the eyes, so people tend to use sun glasses and remain indoors

Also Ghibli winds reduce visibility and the movement of traffic within the city is seriously impeded During a severe Ghibli outside activity becomes almost impossible and this in turn affects commercial and business activities

1 4 UNDERGROUND WATER RESOURCES

The underground water resources of the site of Tripoli are sufficient to satisfy the increasing demands of the population and industry This is due to the existence of two water tables The first or phreatic water table has been exploited by the inhabitants of the Old Town and Menshia for more than 100 years and is used by the local people (11) The level of the first water table which is being used now does not exceed 10 metres below the surface in most parts of the city The water is fresh but it is not very plentiful The second is a deep Quaternary water table (Fig 1 10) This is the most important of the city's sources It is confined to an area within 20-30 kilometres radius of Tripoli The amount of water which can be extracted is generally 100-150 cu metres per hour This water is fresh, abundant and is of excellent quality both for agriculture and domestic use (12)

Figure 1 10


AQUIFERS BENEATH THE JEFARA PLAIN
AFTER DESIO CHIESA VIALI LIPPARINI - ARCHAMBAULT
NORTH
SOUTH
INFILTRATION ZONE
SEA LEVEL
PHREATIC WATER TABLE
A
C
D
B
FAULTED DOME OF THE JEFARA
QUATERNARY & RECENT MATERIAL - AEOLIAN SANDS ALLUVIUM FANS CONCRETIONARY LAYERS
FIRST & SECOND AQUIFERS
TIRRENIAN CLAY LAYER
IMPERVIOUS SEPARATES THE ABOVE
MIOCENE LIMESTONE - TORTONIAN
MINOR AQUIFER
MIOCENE CLAYS & MARLS HELVETIAN
IMPERVIOUS CAP
MIOCENE SANDS GRAVELS SANDSTONES LANGHIAN
CHIEF ARTESIAN AQUIFER
CRETACEOUS
?
TRIASSIC
?
DYKES & INTRUSIONS
TYPES OF WELLS
A. LITTORAL PHREATIC
B. INNER JEFARAN
C DEEP QUATERNARY
D ARTESIAN

1 5 TRIPOLI'S WATER SUPPLY

The oldest part of the city is served by a municipal system of water mains, but certain sections of the city, notably the newer residential areas of Gurgi, Giorgimpopoli and Gargaresh depend upon smaller private sources of water supply (see Chapter 6)

The municipal system is supplied by three pumping units

(a) The Pumping Unit of Bu Mulyana which is located to the south of the city near the Shanty Town, is comprised of 9 wells, each with a capacity of 150 cu m per hour, a generating system with four vertical axis electropumping machines, each of 120 horse power, and two collection and settling tanks, each one with a capacity of 2,000 m^3 There is also an electrical generating plant of 600 kv in reserve The quantity of water delivered daily amounts to 26,000 m^3, with starting pressure of 35 kilos per square metre The cost of the construction of the Bu Mulyana pumping unit has been estimated at £L 120,000 in 1966 (Plate 1 2) (13)

(b) The Pumping Unit of Bab Fornaj which is located in the Ben Ashur quarter to the south of the city, is comprised of eight wells, each with a capacity of 180 cu m per hour, and a generating station with two horizontal-axis electropumps, each of 120 horse power The quantity of water delivered daily amounts to 26,000 m^3, at a starting pressure of 35 kilos per square metre (14)

Plate 1.2(A) Bu Mulyana Water Pumping Station

Plate 1.2(B) Bu Mulyana - view of pumping machinery

(c) The Pumping Unit of Bab Ben Gashir is also situated to the south of Tripoli It is comprised of two wells, each with a capacity of 70 cu m per hour, and equipped with horizontal-thrust electropumps of 30 horse power each The quantity of water delivered amounts to 2,800 m^3 per day (15)

Thus the total amount of water delivered to the city daily was 56,000 m^3 in 1966, it rose to 65,000 cu m^3 in 1968, due to the increased demand for water by the population of the city

The above pumping units draw water from the second aquifer stratum, the depth of which is estimated at 35 m

Distribution System

The pipe system of the municipal supply consists of the mains connecting the pumping stations and reservoirs together with the distribution mains, the distribution mains with a ring connection to keep water pressure equalized throughout the system, and connections to individual consumers The connecting mains total 14 5 km of pipe with a diameter between 533 mm and 300 mm, the distribution net is comprised of some 120 km of iron pipe with a diameter between 250 and 100 m , the individual connections are of smaller bore The "ring" device for equalisation of pressure is supplemented by two compensation tanks, one in the Old Town and the other in the Dahra quarter, with a total capacity of 200 m^3 At its highest point in the system, water reaches a height of 39 m above sea level The pipe system serves an area of about 1,450 hectares in all (16)

In short, it can be concluded that the Municipality Pumping Station supplies the inner zone, central business district and only parts of the middle and outer zones of Tripoli

The private system of water supply within the upper class residential areas of Gurgi, Giorgimpopoli and Gargaresh consists of 23 major artesian wells with large reservoirs for water distribution In addition, there are 110 wells scattered throughout the middle and outer zones These wells serve the lower income groups

Both the municipal and private water supply system provide adequate quantities of water, satisfying all the requirements of the city This arises primarily from the abundance of the underground water resources within the city and its metropolitan area

Conclusion

It can be seen that the physical setting of Tripoli is of primary importance in the evolution of the city The topography of the site of Tripoli, the existence of well drained areas, the availability of adequate water supply, and the site of the sea port, were initial factors in the urban development of Tripoli Also the hinterland of the city, which includes the Jefara plain and the Jebels, is a good agricultural region and therefore able to contribute to the needs of the population of Tripoli The favourable climatic conditions also increase its potential as a regional headquarters of the Muqataa of Tripoli

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CHAPTER II

THE ARAB TOWN CLASSICAL ORIGINS

The Old Town of Tripoli is the most ancient part of the city Its original development was initiated by the Phoenicians who chose the site of Tripoli in order to function for their commercial activities in the Mediterranean Sea There were some geographical factors which encouraged the Phoenicians to establish this commercial centre Firstly, the geographical location of the site of Tripoli on the sea coast Secondly, the existence of the natural harbour near the chosen site Thirdly, the availability of the agricultural hinterland of the Jefara and the Jebel regions with good routes linking the coast with the rest of Tripolitania.

2 1 MARCA UIAT

This is the most ancient name of the present Tripoli Marca Uiat was established by the Phoenicians on the site of the Emporium (trade market) between 700-800 B C It was one of the three Phoenician commercial centres in Libya, the others being Sabrata and Leptis Magna "The settlement probably lay in the north eastern part of the area now covered by the Old Town, close to the roadstead formed by the reefs now incorporated in the north-west mole of the modern harbour "(1) Its site and position were of great importance to the Phoenician ships and their trading activities in the Mediterranean basin This Phoenician settlement had a limited built-up area, which consisted mainly of a residential zone and a considerable number of shops and stores

The main function of the establishment of the Marca Uiat was for the commercial activities of the Phoenicians who gained a great reputation in the Old World as traders and craftsmen Their activities were divided between two major trade routes between the Eastern and Western Mediterranean countries, and between Southern Europe and West Africa Phoenician ships had to transport textile goods, agricultural equipment, tools and other household articles from Europe and the Levant to Marca Uiat The goods were retransported again through the caravan routes to the Sahara oases and West Africa

This transport of goods through Marca Uiat increased the importance of the town and brought wealth and prosperity to the local population In addition, Marca Uiat was also functioning as a centre for the Jefara plain The Jefara supplied the population with agricultural and animal products and the town could provide the rural people with their household requirements Thus exchange of goods between the urban centre of the Marca Uiat and the rural zone of the town within the <u>Menshia</u> area resulted in a migration of Berbers from the Jefara and the Jebel regions towards the town The local population mixed with the Phoenicians, who were more advanced technologically and had a fair degree of civilization, exemplified in their towns and the numerous fine engravings discovered in recent times

2 2 OEA

When the Romans occupied the western part of Libya in 148 B C , they paid great attention to developing the three Phoenician centres as new Roman towns Both Leptis Magna and Sabrata were more fortunate in being well planned and having a real urban life On the contrary, Marca Uiat, known to the Romans as Oea, had grown very little This state of negligence was altered at a later date particularly when the Emperor Augustus of Rome came to power He declared Oea as a free city "All'epoca d'Augusto vene proclamata città libera con dritto de zecca e da quel tempo principali il fiorire della città "(2) Furthermore, the status of Oea improved greatly when Septémus Severus (141-211 A D) granted the same rights (Jus Istalicum) as many other Roman provinces This political grant for Oea meant recognition of the importance of the town as an intermediate centre between Leptis Magna to the east and Sabrata to the west Other encouraging geographical factors were the productivity of the hinterland and the convenience of the harbour These considerations stimulated Septémus Severus to shift the capital of the Roman Africa (which included Tripolitania and Tunisia and termed 'Numidia') from Liptis Magna to Oea in 193 A D and re-named later Oea town and then "Tripolis" which meant the three cities

This political movement was of great importance since it resulted in an increase of the size of the built-up area in many parts of the town with more concentration of buildings in the north of Oea near the port The remains of the growth of Oea have been discovered by both Italian and British archaeologists in various sites particularly in the north and south The remains consist of "houses with mosaic floors and painted mural decoration between Bab el Gedid and the sea, a colonnaded building beside the north-west esplanade, a building which may have been a private house on the waterfront north-west of the Castle, pottery kilns under the Electricity Works Excavations under the Castle itself have revealed an extensive complex of foundation walls and sandstone platforms, as well as many fragments of mosaic pavement and large Corinthian columns with cipollino staffs The site appears to have been that of a large public building, perhaps a bathing establishment "(3) But the most important Roman remain which is still existing is the Arch of Marcus Aurelius The Arch stands at present in a piazza facing the Gate of Bab el Bahr quarter on one side, and facing the harbour on the other (Plate 2 1) Haynes states,"The Arch was built at the expense of a local citizen and magistrate, Caius Calpurnius Celsus, and dedicated in A D 163 to the emperors Marcus Aurelius and

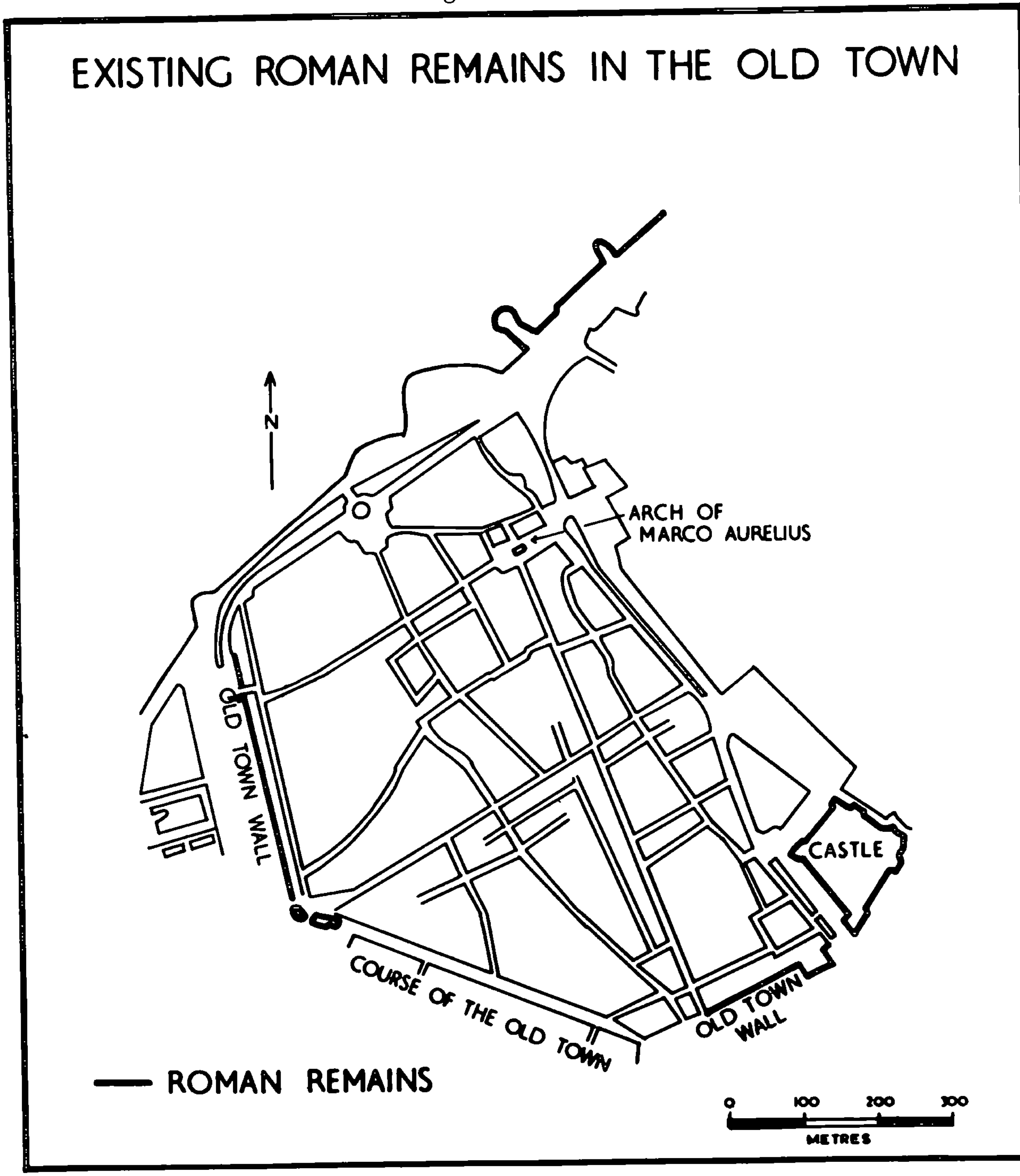
Plate 2.1 The Marcus Aurelius Arch in Bab el Bahr quarter - Old Town

Lucius Verus by the pro-consul Sergius Cornelius Scipio Salvidiems Orfitus and his legate Uttedius Marcellus The dedicatory inscription adds that the arch was built on public land The site was on the intersection of two main streets of the ancient city, and a four-sided design with two arched passageways crossing at right angles was accordingly chosen The greater length of the north-east and south-west sides suggests that the approach from the harbour was considered the more important The arch was build entirely of marble, a fact which is also carefully recorded in the inscription It is almost certainly the work of Greek masons "(4)

All these remains obviously indicate that the built-up area during the Roman rule extended south-eastwards as far as the castle and westwards as far as the western wall of Oea town The buildings consisted of private houses and public buildings for Government administration as well as private baths that belonged to the Ruler's families The distribution of land use patterns within the town was distinct, since the residential zone was located to the north (now Bab el Bahr quarter), whereas the shopping centre was situated near the harbour area Other public buildings were generally confined to the site of the present castle (Fig 2 1)

The Roman ruler Asfarus constructed a wall surrounding the whole built-up area of Oea town in order to protect it from the nomadic tribes of the interior as well as from any outside invasion Moreover, Asfarus made the foundation of

Figure 2 1


EXISTING ROMAN REMAINS IN THE OLD TOWN
N
ARCH OF
MARCO AURELIUS
OLD TOWN WALL
CASTLE
COURSE OF THE OLD TOWN
OLD TOWN
WALL
ROMAN REMAINS
0
100
200
300
METRES

the castle on a small island near the town

The exact size of the built-up area of Oea town as a whole was not known, but Haynes argues that "the line of the antique wall is believed to have been followed by that sector of the Islamic wall (now demolished) which runs from the Bab el-Gedid to the Burg el-Karma (along the line of the present Sciara Sidi Omran) and thence north-eastward to the Dar el Barud A Roman gate has been rather doubtfully identified next to the Bab el-Horiyah A Neo Punic cemetery which has come to light near the site of the former Burg of Sidi el-Haddar (Fort della vite) shows that this area, although almost certainly inside the wall, was not built-up "(5

The commercial activities of Roman Tripoli were of great importance, for both retailing and wholesaling Most of the agricultural products of the hinterland were transported by the farmers to the market in order to be exported to Rome Furthermore, Tripoli was at the beginning of the caravan routes carrying Roman goods to the Sahara oasis and West Africa, and the West African goods to Rome

Roman Oea survived for about 577 years from 148 B C until 429 A D During this long period, the town witnessed a complete change from the small Phoenician settlement of Marca Uiat to a main Roman town which enjoyed prosperity and a great degree of civilization Oea also witnessed an increase in the number of its population which was mostly Roman with some Berbers and Jews

2 3 VANDAL AND BYZANTINE OCCUPATIONS

When the Vandals took over Tripoli in 429 A D the town was subjected to great damage which dominated the whole 34 years of Vandal occupation Most of the residential area and public buildings were destroyed Furthermore, some parts of the town walls were pulled down Ben Massaud Fushaika states, "The Vandals took Tripoli as well as other towns they approached They destroyed Leptis Magna and Tripoli which had been deserted by its inhabitants who had fled from the Barbarian hordes They removed its treasures, demolished its magnificent buildings and the walls of the town and took away the most beautiful works of art "(6)

Trade ceased to function freely and the caravan trade stopped totally Disease spread out among the population of Tripoli, and migration from the urban area took place The result was a great decrease of population through mortality and out-migration Hence this period of Vandal occupation could be considered as the worst era in the history of Tripoli.

In 463 A D , the Byzantine Emperor Justinianus sent General ~~Belisarirus~~ Belisarus from Constantinople to take over the whole of Tripolitania He defeated the Vandals and dismissed them from the country and expropriated Tripolitania for the Byzantine rule (7) The Byzantines paid very little attention to the urban development of the town, but the fortifications and walls of the town received more attention This is related to the fact that the Byzantine Governors wanted to protect themselves and their garrisons inside the town from any outside attack which might break out either from the sea by foreign enemy or by the interior tribes of Tripolitania

Thus, Tripoli during the Byzantine occupation (463-642 A D) was functioning both militarily and politically Other urban activities such as construction and commerce declined The population of the town also decreased further owing to the spread of disease and out-migration Therefore, the Byzantine rule could be considered as a continuation of the Vandal era, both were characterized by the cessation of most urban activities

2 4 THE EARLY ARAB CITY (642-909 A D.)

When the Arabs took over Tripoli under the leadership of Amr Ibn el Ass in 642 A D , their first activity was the construction of a mosque named Amr Ibn el Ass (8) It was situated on the western side of the present Ahmed Basha mosque The location of the mosque was chosen carefully on high ground (now near the castle) Construction of houses, shops and other mosques followed All these activities expanded the built-up area in many directions, especially in the northern and the western sectors of the town, whereas the shopping centre was confined to the south-east Handicraft workshops were located near the commercial area

The number of inhabitants increased by in-migration of the rural people and by the arrival of new Arab administrators At a later date, they mixed with the original people of

Tripoli, who were Berbers, Byzantines and Jews

The commercial activities within the town started to evolve again, the caravan trade returned to normal and trade between the town's people and rural dwellers resumed

As far as political and administrative functions were concerned, Tripoli was of great importance since it was chosen to be a capital of both the Umayyads and the Abbasids in Libya Unfortunately, this centralization of the administration within the town encouraged the chief tribes of the Jefara plain and the Jebel regions to capture the town in an attempt to get rid of Arab rule and to govern their lands by themselves Thus, the town did not enjoy peace and tranquility in certain periods of the first Arab era

2 5 THE SECOND ARAB PERIOD (910-1509)

By 910 A D Tripoli town started to be subjected to political instability, particularly when the warlike tribes of Beni Hilal and Beni Suleim came to answer the appeal of the Fatimite King Both tribes affected the urban life of the town and disturbed the inhabitants As a result, many dwellers returned to their original homes in the Jebel, leaving their houses and shops A state of anarchy continued for the next three hundred years The town was subjected to fourteen different occupations, each with its successive subjugations, rebellions, repressions and revolts, affecting not only the urban life and security, but also the extension of the built-up area and commercial activities Tripoli only maintained its communication value as a main rest centre for the Moslem pilgrims of the Maghrib during their journies to Mecca

Although Tripoli town did not enjoy stability during the second period of the Arab rule, urban life and commercial activities survived, as we learn from two Arab travellers who visited Tripoli during their travels in North Africa the first remarkable one was Abu Abd el Bakri who visited Tripoli town in the eleventh century (9) He gave a general description of the town "Tripoli is surrounded by a great huge wall and it is overlooking the coastal sea It has a well-situated mosque (Jama Amr Ibn Ass mosque) and has a great number of markets which are full of various goods Tripoli also has many hot Turkish baths The port of Tripoli is safe and well sheltered from strong winds " El Bakri also mentioned the Arab gardens surrounding the town and referred to their agricultural activities The second Arab traveller was El Tejani who visited Tripoli in 1307 A D Tejani also gave a more general description of Tripoli and mentioned very few urban facts These may be summarized as follows "Tripoli has a huge castle which is the residence of the Wali (Governor) The Arab houses have a striking feature of whiteness Tripoli town is full of bazaars with their oriental goods and has many mosques as well as hot Turkish baths "(10) No information was given by either Arab traveller on the size of population

Broadly speaking, Tripoli during the whole Arab rule evolved greatly and the built-up area extended and covered most of the open land inside the walled area Most of the building activities were concentrated on the construction of private houses, mosques, shops and public baths The residential zone occupied most of the western and the northern sections of the town, whereas the commercial and industrial zones were confined to the south-east, owing to its good accessibility to the suburbs of Tripoli and the productive plain of the Jefara The inhabitants of the town were mostly Berbers, Arabs and Jews

2 6 THE SPANISH OCCUPATION AND THE KNIGHTS OF ST JOHN OF JERUSALEM

Tripoli town during the Spanish occupation (1510-1535) and during the rule of the Knights of St John of Jerusalem (1535-1551) was entirely a military base There was a concentration of soldiers and army officers who were brought to Tripoli from Spain and Malta in order to garrison the castle and the fortifications This action was taken as part of a campaign against the Moors in North Africa in general and Libya in particular The Spaniards and the Knights of St John wanted to suppress the Moors in their own strongholds after their expulsion from Spain This expedition was supported and financed by King Ferdinand V and it was under the command of Admiral Conte Perdo Navaro The Spanish rulers wanted Tripoli to function as a stronghold in order to maintain their full domination in the Mediterranean basin (11

When the Spaniards handed over Tripoli to the Knights of

St John of Jerusalem in 1535, for political reasons, there were threats and rebellions from the local tribes of Tripolitania against the foreign rule The Knights of St John therefore concentrated their efforts on completing the building of the castle and strengthening the walls of the town and its fortifications These defence measures were more important for the Knights than anything else

Tripoli was no longer a great commercial centre for either local or foreign goods owing to the high taxes imposed on the latter Exchange of goods between the traders of the town and the farmers ceased, because too many restrictions were imposed on the transportation of goods and foodstuffs and on the movements of the town's people

Moreover, the population of the town decreased, firstly because of the massacre of 5,000 people during the Spanish occupation, secondly the outbreak of plague and thirdly the migration of 500 families to Tajura, 16 kilometres to the east of Tripoli As a result, the inhabitants were reduced to only 10,000.

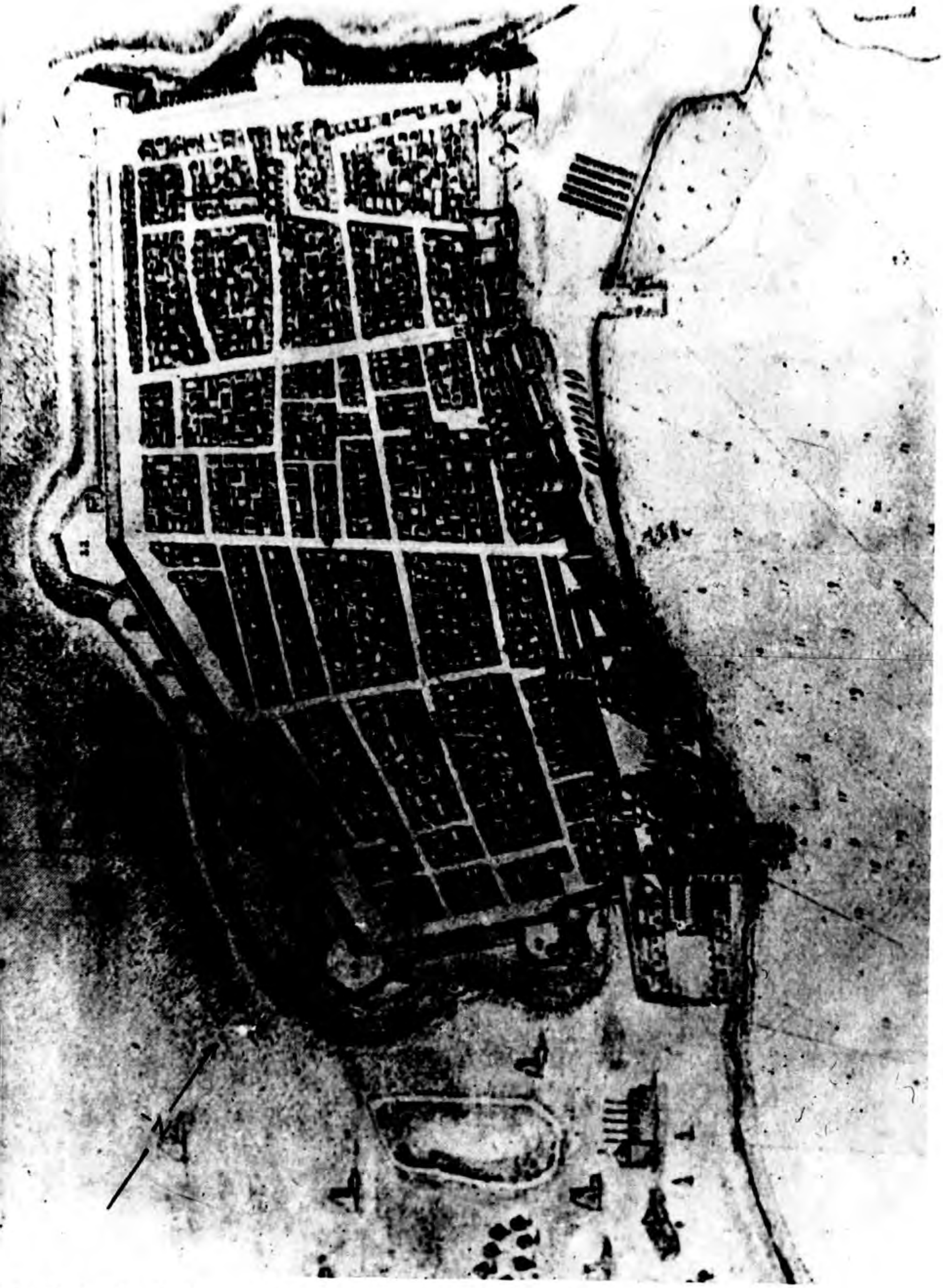
2 7 THE FIRST OTTOMAN RULE

The Turks captured Tripoli in 1551 A D from the Knights of St John of Jerusalem after bitter fighting, they were led by both Murad Agha from inland and Targhut Basha from the sea Tripoli started to grow again The Turkish governors, such as Darghut Basha, Ottoman Basha and Mohammed Basha, encouraged the building of houses, shops, restaurants, cafés and hot baths Secondly, they constructed two big mosques known as Darghut Basha's mosque and Mohammed Basha's mosque Both are situated to the eastern sector of the Old Town Thirdly, they built many primary schools in different sectors of the town Economic and industrial establishments were not neglected, for example, Khalil Basha set up a new factory for manufacturing the Libyan currency All these various activities enlarged the built-up area in many directions where open land was available

Moreover, the Turkish administration paid great attention to the maintenance of the castle and reconstruction of the fortifications of the walls of the town These military measures were taken by Darghut Basha in particular, in order to encounter any surprise attack launched by the Spaniards or the Knights of St John of Jerusalem from the sea

The only notable traveller who visited Tripoli during the first Ottoman occupation in 1660 A D was El Ayyashi He came from Morocco and gave a very good description of the walls of the town, gates, built-up area, houses, shops and mosques He was impressed by the striking whiteness of the houses and clean streets(12) (Plate 2 2)

As for the population of Tripoli, it increased owing to the return of most of the local residents from Tajura and other rural areas of the Jefara plain Therefore the commercial activities of the traditional shopping centre were resumed Exchange of goods developed between Tripoli on one



ate 2.2 The built-up area of the Old Town in 1675

hand, and Malta and Italy on the other The caravan trade also resumed between Tripoli and West Africa Thus, the Arab Suks (markets) were very active and the volume of the commodities either imported or manufactured in Tripoli increased

Tripoli was considered the main administrative headquarters of the whole of Tripolitania as well as the main capital of the "Wilayat Tarabulus el Gharb" (Libya) These two functions increased its significance as the most advanced and populous town in Libya Moreover, Tripoli was a great military base in North Africa as it was the headquarters of the Turkish garrisons and the main centre of the Ottoman fleet This military significance resulted in the concentration of soldiers, army officers and their families

Broadly speaking, Tripoli town in the 159 years of the first Ottoman rule grew and expanded within the walled area, and the town began to emerge as a real urban centre not only of Tripolitania but also of North Africa

2 8 KARAMANLI RULE (1710-1835)

Tripoli town continued its urban growth during the Karamanli rule Many private houses, shops and public facilities, such as hot Turkish baths, were set up in order to answer the needs of the growing town and its population Miss Tully in 1783 states "The whole of the town appears in a semicircle, some time before reaching the harbour's mouth The extreme whiteness of square flat buildings covered with lime, which in this climate encounters the sun's fiercest rays, is very striking The baths form clusters of cupolas very large, to the number of eight or ten crowded together in different parts of the town The mosques have in general a small plantation of Indian figs and date-trees growing close to them, which, at a distance appear to be so many rich gardens in different parts of the town, give the whole city, in the eyes of a European an aspect truly novel and pleasing "(13) She continues her description concerning the castle and the walls of the town "The castle or royal palace, where the Bashaw resides, is at the east end of the town, within the walls, with a dock-yard adjoining, where the Bey (the Bashaw's eldest sone, and heir to the throne) builds his cruisers This castle is very ancient and is enclosed by a strong high wall which appears impregnable but it has lost all symmetry on the inside, from the innumerable additions made to contain the different branches of the royal family, for there is scarcely an instance of any of the blood royal, as far as the Bashaw's great grandchildren, living without the castle walls These buildings have increased it by degrees to a little irregular town "(14) "The city of Tripoli is, or rather has been, surrounded by a prodigiously strong wall, and towers, which are now in bad order, but persons of judgment in these matters say, that with repairs only, it might soon be made one of the strongest fortifications The sea washes this town on three sides, and on the fourth a sandy plain, called the Menshia joins it to the rest of the country "(15)

The general description of the town given by Miss Tully was of great significance in the study of the evolution of Tripoli Moreover, the travellers F W Beechey and H W Beechey also visited Tripoli in 1827 and gave another general description of the site of the town, its form, walls and castle They disagreed with Leo Africanus who visited Tripoli in 1516 They stated on the beauty of Tripoli town "Leo Africanus has informed us that the houses and bazaars of Tripoli were handsome compared with those of Tunis How far this epithet might have been applicable at the period here alluded to, we are not ourselves able to judge, but we must confess that the beauty of the existing houses and bazaars of Tripoli did not appear to us particularly striking, and if the comparison drawn by Leo may be still supposed to hold, we do not envy the architects of Tunis whatever fame they may have acquired by erection of the most admired buildings of the city "(16)

However, no more information was given by Arab or European travellers on the number of houses, shops, restaurants hotels, etc , or on the construction activities within the town on the part of the local inhabitants The only remaining building is the big mosque known as Ahmed Basha's mosque, which was built by Ahmed Basha, the first Wali of the Karamanli dynasty The mosque is situated now on high land very close to the site of Amr Ibn Ass ancient mosque

When Yousaf Basha (the second nephew of Ahmed Basha, the head of the Karamanli family) came to power (1798-1834), he concentrated most of his efforts on spending money on the Libyan marine fleet which brought a lot of revenue Ben Massoud Fushika states,"During his governorship Libya enjoyed the most prosperous period she ever had This was primarily due to the abundant revenue which his soldiers obtained from the European ships which crossed the southern Mediterranean Sea The ships that paid the protection money he requested were given safe passage Those which refused to pay were seized and brought to Tripoli as prizes "(17)

Moreover, the Karamanli rulers encouraged the slave and caravan trades in order to get more taxes from the traders The traffic both to north and south increased enormously, and brought quite a considerable income to the Governmental budget But owing to heavy expenditure spent on the Libyan marine fleet and the huge Karamanli family, the Government had not sufficient capital to invest in economic or social schemes and planning programmes The maintenance of the walls and the fortifications of the town gained most attention, in order to secure the state against either local or foreign surprise attack

The population of Tripoli decreased during the last rule of the Karamanli family owing to three disasters The first was the famine of 1784 which affected the town's people as well as the rural people, and caused many deaths The second was the appalling plague which occurred in 1785 and resulted in the deaths of 10,000 people within the town, and 25,000 people in the Menshia (the suburb of the town) The third disaster was the occupation of Tripoli in 1793 by the Georgian adventurer, Ali Borgul, and the massacre of many townspeople (18) As a result, a great number of the inhabitants fled inland escaping from terror and disease and Tripoli became a real ghost town especially when fighting broke out between Yousaf Basha and Ali Basha forces.

2.9 THE SECOND OTTOMAN RULE (1835-1911)

The second Ottoman rule may be divided into two periods The first period from 1835-1862 was characterized by the instability of the Turkish administration, owing to the series of rebellions and disorders which broke out in many parts of Tripolitania The chiefs of Sirte and Garian regions, for example, wished to rule their own lands and to get more autonomy, whilst the Turkish Governors wanted to bring them under their own administration However, the three year period of rule allowed to each Turkish Governor was too short to enable them to achieve any serious reforms (19)

The second period of Ottoman rule from 63 1836-1911 was ? characterized generally by greater political stability, and the Turkish Governors realizing the backwardness of these North African territories, started to conduct serious urban, social and economic schemes The aim was to improve the standard of living of Tripolitanians who had suffered very much from neglect by the Ottoman authority Tripoli was affected greatly by these reforms The most important social schemes were the establishment of courts, hospitals and dispensaries, primary and secondary schools, a military college, an Islamic school for arts and handicrafts The Turkish Governors also established a school for industrial training, constructed the market of Suk el Mushir in the Old Town, and encouraged people to open restaurants and hotels. Apart from the economic schemes, the Turkish Governors paid great attention to the maintenance of Tripoli's castle and the walls of the town Moreover, a building for the Municipality of Tripoli was established in the Old Town, for the first time in Libya The Municipality was authorized to carry out duties such as the inspection of foodstuffs in the markets and the shops, the issue of commercial licences, the cleaning of the city, the supply of water resources, the establishment of a sewerage system, the supervision of bars and cafes

By the year of 1885, the Turkish Administration issued a very short census on the number of the establishments existing in the town Their enumeration is as follows -[20]

Table 2.1 Commercial Establishments, Dwellings and Institutions in the Old Town of Tripoli, 1885

Type of commercial establishment, institution, etc	Number
Big mosques (Jamaa)	9
Small mosques (Masjid)	18
Churches	5
Synagogues	7
Secondary schools	1
Primary schools for boys	15
Primary schools for girls	1
Free Islamic centres	3
Bakeries	20
Mills	22
Workshops for leather dressing	1
Shops	1,019
General wholesale stores	40
Cafes	22
Turkish baths	14
Hotels	13
Pharmacies	3
Hospitals	1
Traditional houses	2,453
British firms	9
Maltese firms	11
European consulates	7
Total	3,694

Source Antiquities Department, Tripoli, 1967

The population of Tripoli (the Old Town and the Menshia area) numbered 25,000 in 1885, and foreigners numbered 1,911

2 10 THE OLD TOWN DURING THE LAST OTTOMAN RULE

The Old Town completed its final urban development during the last Ottoman rule, when the built-up area covered the total land of the "Madina" for residential, commercial and administrative uses This concentration of buildings within the Madina resulted in attracting more urban residents as well as stimulating specialized commercial activities and handicraft workshops for textiles, gold, silver smiths and leathers within the southern and eastern parts of the Madina, while the residential areas occupied the central and the northern parts of the Madina

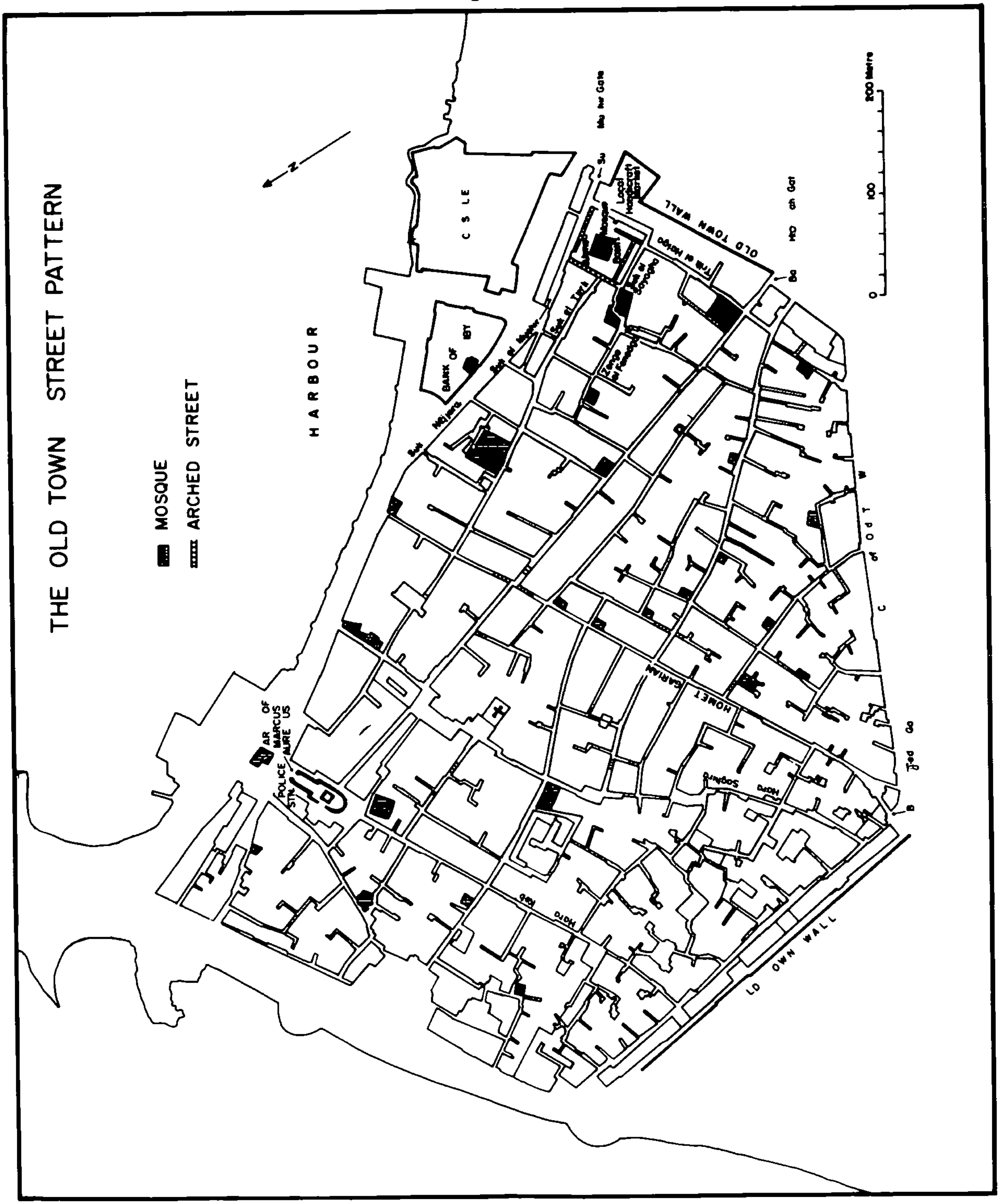
The Madina reflects many influences, including social classes, high prices of land, and political instability which forced the business men, traders, administrators and other civil servants to live and work within the walled Madina area All these political and economic factors have greatly influenced the shape of the Madina and concentrated all kinds of land use patterns and limited its expansion This concentration of various urban land uses in a walled town is typical of all native North African cities and towns such as Fez, the Casba of Algiers and the Old Town of Tunis All the layouts of these traditional Arab towns have the same characteristics in terms of town plan and morphology of the houses and streets

An examination of the Madina within the last Ottoman occupation reveals that the built-up area occupied the whole total area within the walls of the town and covered 32 8 hectares The commercial use occupied one-third of the Madina, the rest being residential and administrative The limestone walls of the Madina were built by the Romans, then the Arabs, Spaniards, and were eventually reconstructed by the Turkish military engineers The total length of the wall was 2,700 metres The wall had four gates Zenata, Bab el Bahr, Khandag (or Arab gate) and Menshia (Fig 2 2) When Ali Rida Basha became a Governor of Libya in 1869 he closed Bab Zenata and opened a new gate known as Bab el Jedid (new gate) These gates were closed by special guards at night, when nobody was allowed to enter without the permission of the authorities

The irregular and narrow streets and avenues of the Madina are very numerous (Plate 2 3) This was characteristic of traditional Arab planning which did not follow any regular forms as well as absence of effective planning of the rulers It also reflected the economic value of the land and the desire of people to live close together Streets and avenues occupied a considerable part of the total area they are estimated to cover six hectares

The directions of the main streets differed from one sector to another Three cross streets ran from south-west to north-east, and four long streets ran from south to north. Both cross and long streets are about four metres wide, and are

Figure 2 2


THE OLD TOWN STREET PATTERN
MOSQUE
ARCHED STREET
HARBOUR
OLD TOWN WALL
POLICE STN
BANK OF

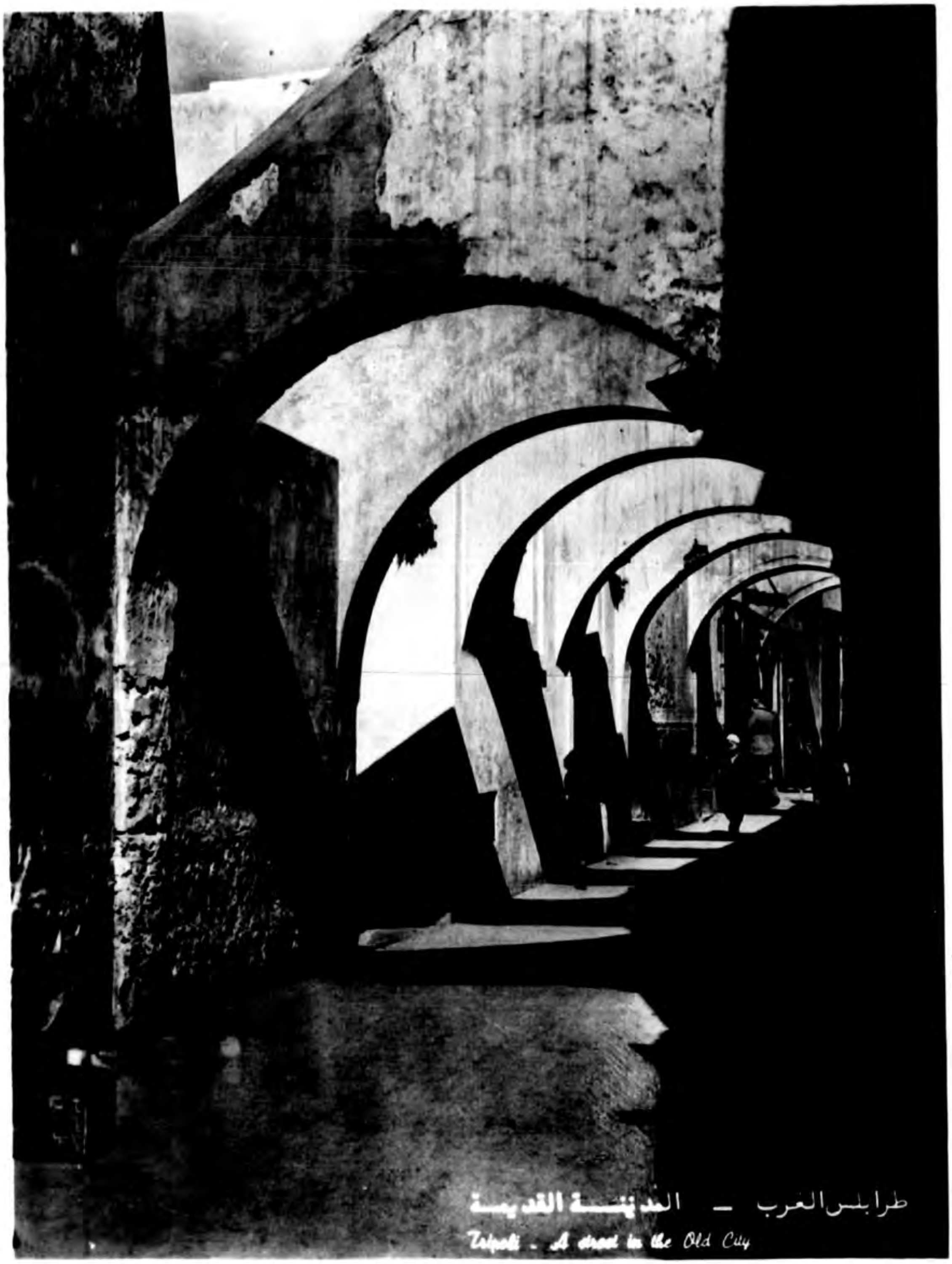


Plate 2.3 A typical street in the Old Town

convenient for animal transportation (and now for small cars in one direction) These major streets, which date from Turkish rule, were of great importance, as they led to the main gates of the town Moreover, they were considered as good access to Menshia (suburbs of the Old Town) There are also numerous narrow alleys, located generally in the western sectors of the Madina which were built during the Arab or Karamanli rules (Fig 2 2)

Two types of houses existed the ancient Arab houses are located in the western sector of the Madina in the quarters of Homet Garian, Kushat el Suffar, Bab el Bahr and the ex-Jewish quarters (Hara el Kabira and Hara el Saghira) (Fig 2 3) The architectural style is purely Arab, which is generally characterized by its simplicity and absence of design Here the house consists of one or two floors, and has generally several rooms a work room, a general living room, bedroom, a kitchen, a store room, and two or three bedrooms The courtyard occupies the central part of the house Each room has one or two windows to the courtyard The existence of the courtyard is very necessary, as it allows women to move freely and to be unwatched by neighbours or passers-by In addition, there is a narrow corridor which connects the courtyard with the main door of the house The Arab house seems to have contained in general a single-family household, so that the number of households in general was the same as the number of houses

In contrast, the modern Turkish houses are confined mainly to the eastern sector of the Madina Here, the house consists of two floors and several rooms The courtyard is also found in the centre with wider corridors The Turkish house is well designed and decorated It can support the accommodation of two families

Both Arab and Turkish houses generally have a rectangular or square base Houses are attached to each other, facing the street and with a frontage of one or two windows The roof is flat for traditional and cultural reasons The building material of the Madina is mainly limestones which were found in two areas, Dahra and Gargaresh Limestone is cheap, relatively easy to work, and highly resistant to the climatic conditions of the country, such as variation of temperatures and humidity Roofs of Arab houses are made of date palm wood which were found extensively in all surrounding agricultural lands of the Menshia and Suk el Juma areas Turkish houses had roofs of imported wood from Italy.

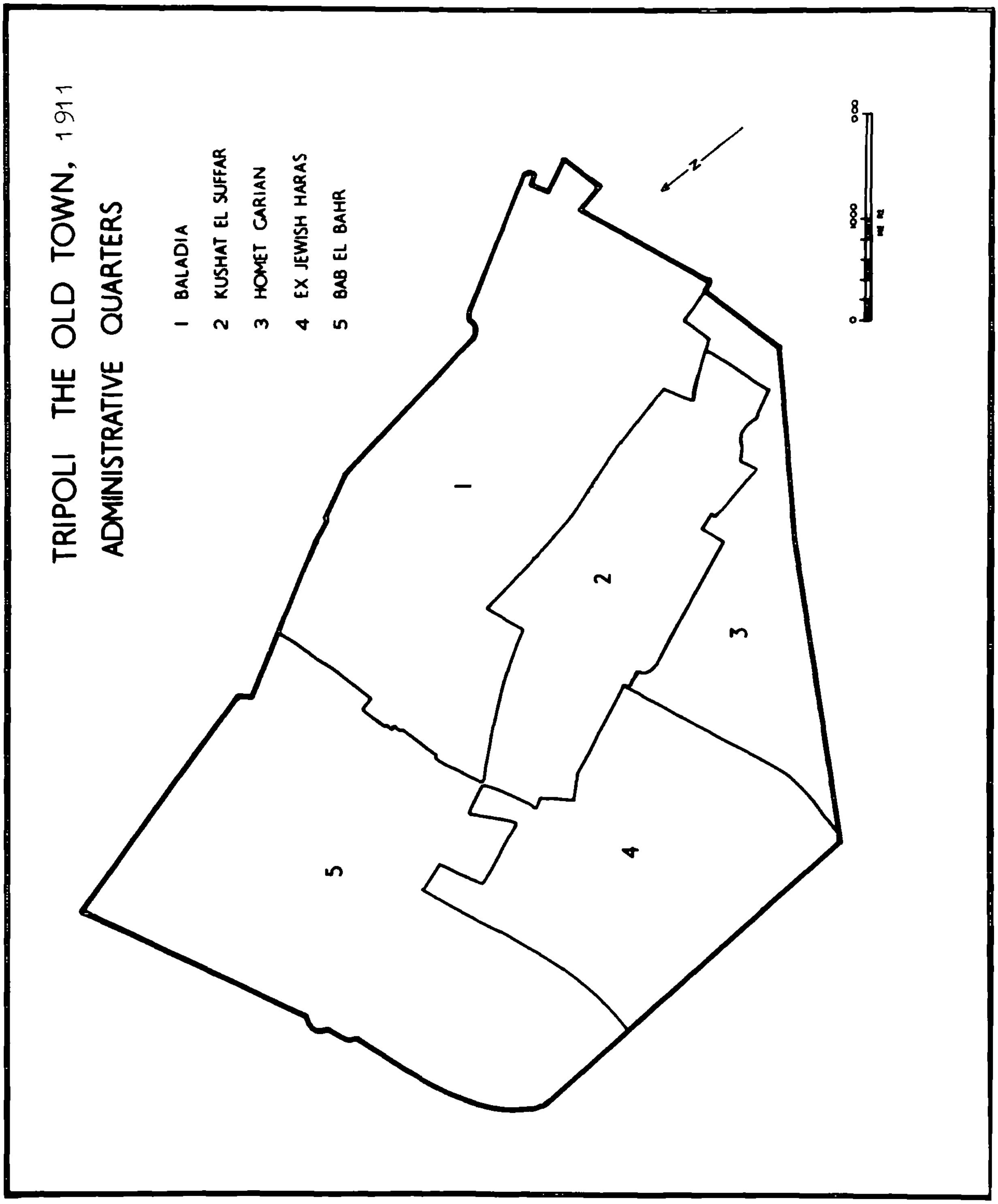
Residential areas were divided as follows (Fig 2 3) -

(a) The Arab residential zone included four quarters Homet el Baladia, Homet Garian, Kushat el Suffar and Bab el Bahr.

(b) The Jewish residential zone was located to the north-west of the Madina, including Hara el Kebira and Hara el Saghira

(c) Aliens, including the diplomatic corps, lived mainly in

Figure 2 3



TRIPOLI THE OLD TOWN, 1911
ADMINISTRATIVE QUARTERS
1 BALADIA
2 KUSHAT EL SUFFAR
3 HOMET GARIAN
4 EX JEWISH HARAS
5 BAB EL BAHR
N
0
1000
1
2
3
4
5

the eastern sector of the Madina

The shopping centre of the Madina included various Suks (markets) such as Suk el Rubaa, Suk el Nesaa, Suk el Leffa, Suk el Siagga, Suk el Attara and Bab el Horiyah All these suks functioned for various commercial activities such as barracans, textiles, silver and gold smiths, etc (see Chapter 4)

Workshops were located near the traditional shopping centre in el Fenedga and Suk el Harir

All these different types of suks and workshops were located close to each other in the south and south-east of the Madina Shoppers could move from one suk to another easily, and shoppers from the suburbs of Tripoli could come through the main gates, as for instance, Khandag or Bab el Arab In other words, the accessibility of the shopping centre was of great importance not only for the inhabitants of the town but also for the rural people of Tripolitania.

Ecclesiastical buildings included mosques, churches and synagogues Small Arab mosques were located in the western sector of the Madina. They were characterized by their simplicity and absence of decoration The large mosques which were built by the Turkish Governors, were decorated and well designed, and were located in the eastern part of the Madina, where upper class people lived

Churches were located in the middle of the Madina, where the Christian people used to live, the biggest church was the

Roman Catholic and the Orthodox church ranked second

Synagogues were confined to ex-Jewish quarters in Hara el Kabira and Hara el Saghira, especially in the former

Government schools were situated to the eastern part of the Madina whereas the Koranic schools were well distributed throughout the whole residential quarters Christian and Jewish schools were found in the middle and western sectors of the Madina

The Turkish Government was located in the castle Here the headquarters of the Turkish administration, Governor's office, secretarial office, Law Court, Police Headquarters, prison and various administrative departments occupied the northern part of the castle, whilst the military garrison of the Turkish soldiers (1,500) occupied the southern part of the castle The castle was thus the administrative headquarters as well as the main military base

Other Government buildings such as the Turkish Military College, Government stores and the Police Station, were found at the Bab Bahr quarter The Customs department and warehouses were at the port, while the Municipality of Tripoli was situated in Suk el Turk within the Madina

All the administrative offices were confined to the eastern sector of the town near the commercial and industrial zones

2 11 EVOLUTION OF SUBURBS

During the last Ottoman rule (1882-1911), the Turkish

Governors started to encourage the inhabitants of the Madina to live outside it The motive was assisted by political stability in Libya as a whole and the desire of the Turkish administration to solve the problem of overcrowding within the residential areas of the Madina owing to the rapid growth of the population and rural migration

There are some geographical factors which encouraged the Turkish administration to implement its new policy, firstly, the existence of uncultivated land and open spaces within the Menshia which could be developed for urban uses Secondly, the accessibility of the Menshia to the Old Town Thirdly, the proximity of the Menshia to the Madina Therefore some urban development began to emerge within the Menshia area and resulted in various commercial, residential, and other public and semi-public urban uses

Table 2 2 Commercial establishments, institutions and gardens in the Menshia in 1911 (21)

Kind of commercial, residential and other institutions	Number
Big mosques (Jawamah)	45
Small mosques (Masajid)	71
Churches	2
Zawayah (religious centres)	45
Primary and Koranic schools	30
Mills	25
Hotels	48
Shops	595
Cafes	22
Military hospital	1
Traditional houses	1,500
Arab gardens	1,200
Total	3,584

The existing suburbs of the Menshia in 1911 were -

(a) Belkheir quarter which occupied the area now occupied by the present quarter The residential areas were concentrated to the south of the Menshia, whereas the commercial zone was confined to Amr Ibn Ass Street (Fig O 2)

(b) Mizran quarter, which was situated to the east of Belkheir quarter, having a larger residential area than Belkheir

The northern part of the quarter was more influenced by Turkish architecture The southern part of the quarter was mainly in Arab style The nortnern part was in fact a residential area for wealthy people and government employees, whereas the southern part was a residential area for the middle and limited income groups The commercial area was located along Mizran Street

(c) Shara el Zawia quarter lay to the south Two sectors, northern and southern, were separated by small scattered Arab gardens The design of both sectors had the same Arab style of architecture The quarter was the residential area of limited income groups and the new arrivals from rural areas, that is to say, it was less advanced in terms of standard of living

(d) Dahra quarter was in the south-east of the Madina on the way to the most productive oasis of Suk el Juma The quarter had two agglomarations of built-up area, and the main road crossed both sectors

(e) Zawiet el Dahmani quarter was located along the main road of Zawiet el Dahmani to the east of Tripoli The residential area was situated a short distance away from the main road, whereas the shopping centre was confined to the sides of the road The quarter grew as a small suburb owing to its accessibility to the Suk el Juma

Other Menshia quarters were mostly scattered built-up areas, and they were located near the main roads whose accessibility to the agricultural areas was of great importance, as for example, Shara el Kebir, Shara Ben Ashur, Shara el Gharbi and Gargaresh together with shops which were scattered and catered for every day requirements The location of houses was found along the main roads and within the Arab gardens In other words, the impact of rural life upon these suburbs was very strong owing to their proximity to the agricultural areas of Tripoli.

The Menshia had three market places The first was situated to the south of the Khandaggate and mainly specialized in selling foodstuffs and vegetables, fruits and breads (Plate 2 4). The second was the Suk el Telatah (Tuesday market) which occupied half the hectare (now Gazala square) and public gardens The suk was for wholesaling and was of great importance, not only for the inhabitants of Tripoli, but also for all the rural people living near the town, being considered as the biggest suk in Libya The third suk, with its numerous shops, was established by the Turkish administration along either side of Shara el Azizia (now Istiqlal Street) The suk was active for both wholesaling and retailing, and contained numerous shops and stores

The population of the Menshia numbered 20,000 in 1885. This increase of population was due to the movement of the population of the Madina to the new residential areas, and an inflow of many rural families to reside in the surrounding areas of Tripoli, especially in Gargaresh, Shara el Kebir and

Plate 2.4(A) Suk el Khubza (Bread Market) at Khandag in 1911

Plate 2.4(B) The Khandag Gate in 1969

Shara el Srim, where accommodation was possible

Conclusion

It can be seen that the Old Town of Tripoli evolved from a small commercial centre established by Phoenicians This urban settlement grew during the Roman, Arab, and Ottoman rules, until it completed its final development at the end of the latter (Fig.2 4) New residential quarters within the Menshia area emerged as a result of the political stability in Libya and the desire of the Turkish administration to create new urban areas outside of the Madina

Figure 2 4

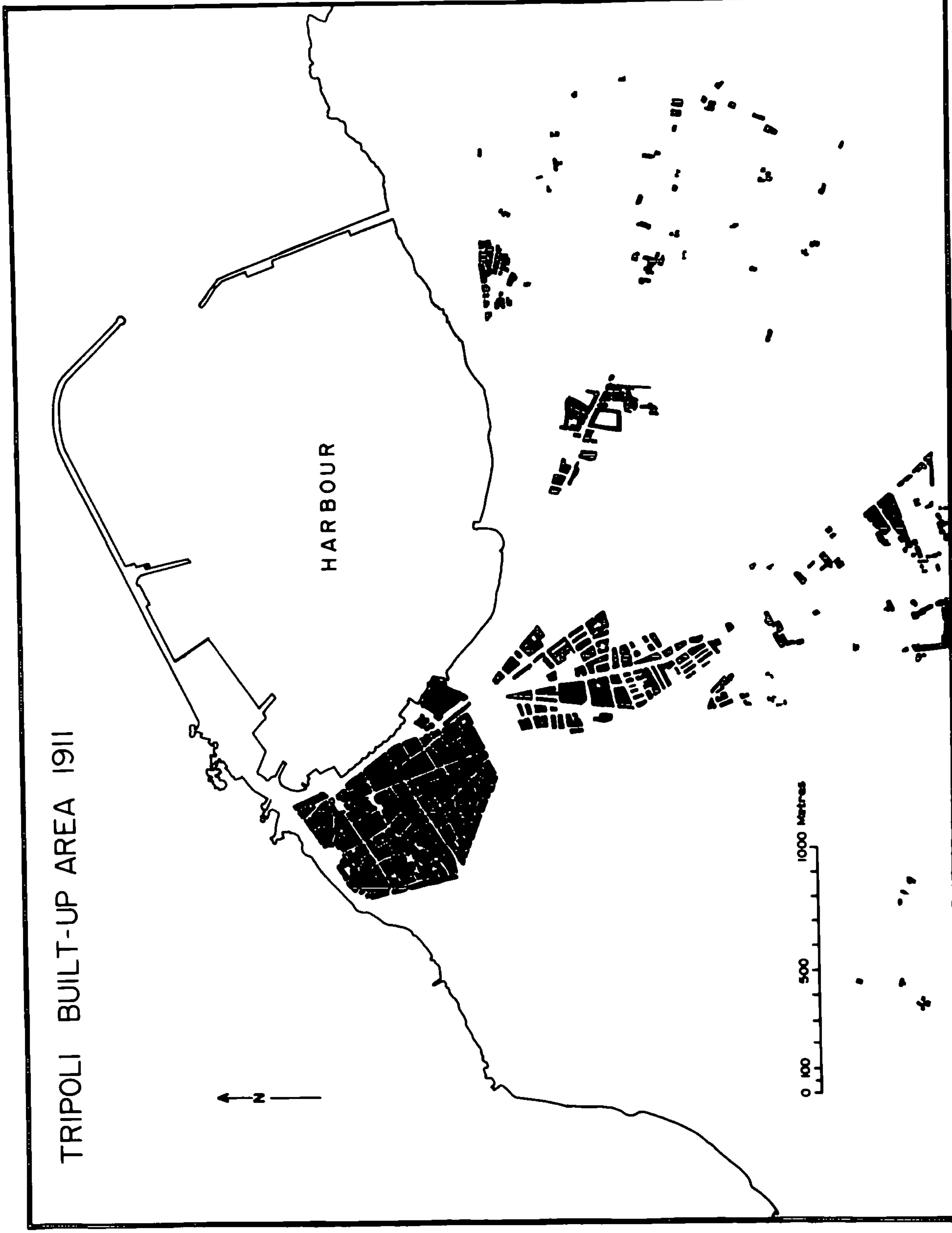
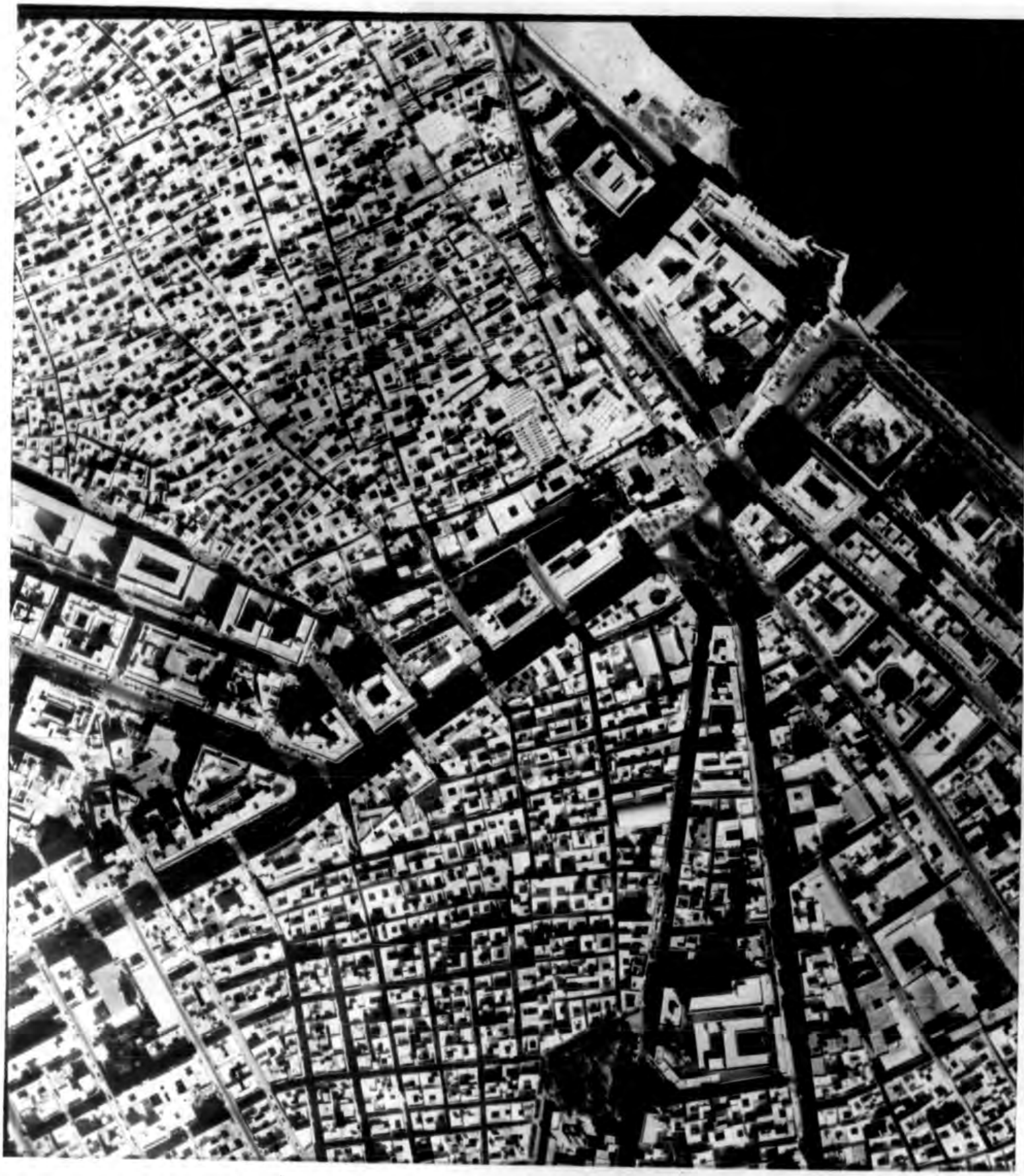


Plate 2.5 The eastern, central, and western parts of the Old Town



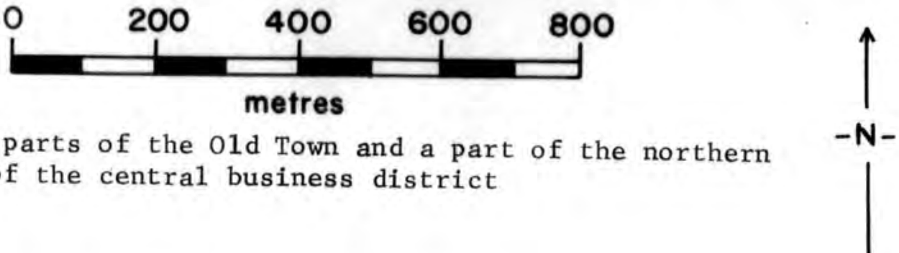


Plate 2.6 Southern parts of the Old Town and a part of the northern sectors of the central business district

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CHAPTER III

THE NEW TRIPOLI A DYNAMIC CITY

3 1 THE ITALIAN ERA

The Italian army took over Tripoli on October 5th, 1911, ending the Ottoman rule not only in Tripolitania but also in Libya as a whole Tripoli then began to witness a new era of modern Italian urbanization which was to have profound effect upon its morphology A new European type of city was created in North Africa, differing completely from the old medieaval town This was realized mainly by the replanning of the Menshia, the result of which was the emergence of a modern colonial city of Italian design

There were three major phases in the Italian urbanization of Tripoli 1911-21, 1922-32 and 1933-39. The preliminary phase was mostly characterized by demolition of parts of the old town walls especially the eastern and northern sections The Italians left only the southern and western sections for their historical value The southern section extended from the castle as far as the Bab el Horiyah and the western section stretched from the Bab el Jedid as far as the north-western end of the ex-Jewish quarters (El Hara el Kebira and El Hara el Saghira (Fig.2 2)) The Italians aimed by their demolition of the walls to break the stronghold of the Old Town so that they could more easily suppress any resistance exercised by the people inside the walled area

Another step taken by the Italians to secure their occupation, was the building of new walls surrounding the whole Menshia These military measures were undertaken to safeguard against any surprise attacks on the Italian army stationed in Tripoli The construction of the new walls was completed by the Italian army in 1914 They extended from the extreme north-east of the city, surrounded the whole southern sectors and ran as far as the north-west of the Menshia (Plate 3 1) They extended for 11 5 kilometres and encompassed an area of 18 1 sq kilometres (Fig 3 1)

The gates in the walls were as follows -

1 Amrus gate which connected Tripoli with the Suk el Jumah district

2 Tajura gate connecting with the Tajura oasis

3 Tarhuna gate connecting with settlements of Tarhuna tribes

4 El Fornage gate leading to the agricultural area of El Fornage

5 Ain Zara gate leading to Sidi Mesri

6 Ben Gashir gate which was important for access to the Ben Gashir area

7 Accara gate which gave access to the settlement area of the migrated Accara tribes of the Ghibla

Figure 3 1

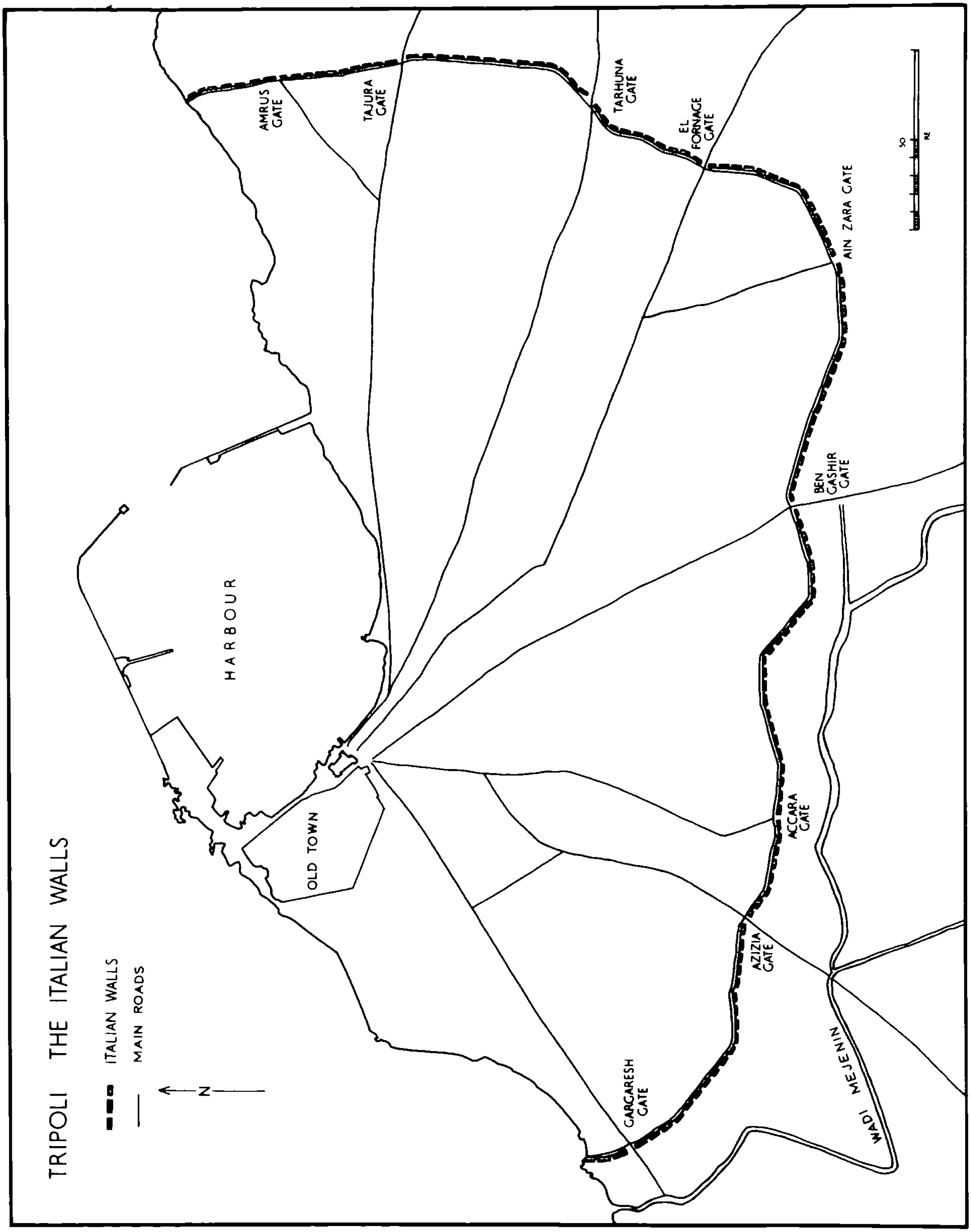

TRIPOLI THE ITALIAN WALLS
ITALIAN WALLS
MAIN ROADS
N
HARBOUR
OLD TOWN
AMRUS GATE
TAJURA GATE
TARHUNA GATE
EL FORNAGE GATE
AIN ZARA GATE
BEN GASHIR GATE
ACCARA GATE
AZIZIA GATE
GARGARESH GATE
WADI MEJENIN

Plate 3 1 Part of the Italian walls near Bab Tarhuna Gate

8 Azizia gate leading to the settlement of the most powerful tribes of the Jefara

9 Gargaresh gate connecting with the most fertile oases of the western Tripolitanian zone

This alignment of the gates with both the coastal zone of Tripolitania and the hinterland of the Jefara was of great importance to the Italians in terms of communications and the transportation of military equipment and supplies The gates were therefore strongly guarded by Italian troops in order to protect the army and its installations, as well as to stop smuggling of any food supplies or arms out of the walled area The Italian army also constructed a road extending immediately behind the walls to facilitate the movement of troops from one part of the city to another

However, the new Italian walls created an administrative boundary between the Menshia and Suk el Juma district

Within the newly walled area, many changes were initiated by the Italian Government acting with the Tripoli Municipality The Arab gardens and the open spaces near the walled built-up area of the Old Town were expropriated The local Arab houses, shops and inns were confiscated and demolished to make way for new buildings The main changes were in the new Turkish streets such as Shara el Azizia (now Istiqlal Street) (Plate 3 2) and Shara Recardo (now 24 December Street) Furthermore, the Italians took another step in urban redevelopment by transferring the most traditional Arab Suks (markets) such as

Plate 3.2(A) Azizia street in 1911

Plate 3.2(B) Azizia street in 1969 (now Istiqlal street).
Note the impact of the Italian colonization.

the Suk el Tulatah (Tuesday market) and the Suk el Khubza (bread market) from their original places to new sites The former is now occupied by Gazala Square and the latter is occupied by Castle Square The Italians also replanned other sectors of the city and the whole of Tripoli's harbour coast

Buildings for public administration as well as a number of apartments to accommodate the Italian officials and their families, were constructed near the coast area in the Shara el Shatt quarter There was little private building by individual Italians owing to the limited number of settlers and lack of capital to be spent on construction

For defensive purposes, the old core of the castle was reconstructed and new barracks were set up in different parts of the city in order to accommodate 40,000 Italian soldiers

The built-up area, during the preliminary phase of the Italian occupation was, therefore, of limited size It consisted only of the Old Town and the scattered Arab quarters with the Italian administrative buildings and their army installations This restricted urban development was explained partly by the outbreak of the First World War in 1914 and partly by the continuous military resistance of Tripolitanians.

The population of both the Old Town and the Menshia was 30,378 in 1911, of whom 22,663 lived in the Old Town, and 7,715 in the Menshia (1) There are no reliable figures for the number of people killed during the beginning of the Italian occupation nor for the number of people who migrated to Tunisia and Egypt

The second phase of the Italian occupation began in 1922, when the Fascist party came to power in Italy under their new leader, Mussolini. Mussolini did not attempt to reach peace by negotiation but insisted on using force General Graziani was appointed as Commander in Chief of the Italian army in an attempt to suppress the Libyan guerilla fighters By 1929, Mussolini had succeeded in ending most local resistance

The Italian Government then began urban development schemes on a large scale The reasons for this were (1) the Government wished to demonstrate its ability to control its new African colonies, (2) in an attempt to solve the problem of over-population in Italy, it encouraged technicians, shop-keepers, labourers and especially the poor peasants of the south to emigrate, and (3) it wanted to create a full urban life for the new Italian settlers [2]

Administrative buildings were constructed in many sectors of the city These were both offices and residences for important officials In addition, much encouragement was given by the Mussolini Government to Italian firms to construct other residential and commercial buildings Consequently, there arose many private houses, banks and multi-storeyed buildings in the main streets, as for instance, in the Corso Vittorio Emanuele (now Istiqlal Street), Via Lombardia (now 24 December Street), Via Lazio (now Mizran Street) and Corso Sicilia (now Omar el Mukhtar Street) [3]

Also the Italian Government erected three hotels designed in Moorish style in different sites of the coastal promenade (Lungomare Conte Volpi and Passeggiata Maresciallo Badoglio now Adrian Pelt Street) Grant Hotel, Waddan and the Del Mehari These were built to accommodate the important army officers as well as high officials and businessmen

Other Italian military installations and barracks were erected, particularly in the Shara el Srim quarter and near Azizia Gate and Gurgi This was due to the growing number of the Italian soldiers who reached 120,000 by the end of 1930

The construction of these military installations was to enforce the Italian colonial policy (as dictated by Mussolini), and also to build up a strong army in case of opposition to this policy Therefore Tripoli became a very important Italian military base, not only for Libya but also for the Italian colonies in East Africa

As far as the social services were concerned, the Italian administration improved the water supplies of the city by digging new wells in the El Fornage and Bu Mulyana areas, and established two pumping stations New water pipes were constructed to provide fresh water to all the citizens in the new sectors of the city Also the Municipality of Tripoli with the technical assistance of the administration, set up new sewerage systems within the old and new towns alike

Health services and education gained some attention from the administration Several block buildings within the

Government Hospital were erected for treatment of different diseases Also the administration established several dispensaries within the residential areas of the city Primary schools for both boys and girls were built in Via Manzoni (Maamun Street), they were the biggest schools in Tripoli and were confined to Libyan pupils Secondary schools for the Libyans were not constructed owing to the Fascist education policy which did not allow the Arabs to have more than a primary education

All these various buildings therefore enlarged substantially the built-up area of Tripoli, especially towards the south and south-east where the amount of both confiscated properties and open spaces was greater The other parts were little developed partly because they were to be dealt with at a later stage but also because many Arab landowners refused to sell their land properties to the local authority

The third phase of the Italian urbanization of Tripoli began with the appointment in 1933 of Marshal Balbo as Governor General of the combined civil territories of Tripolitania and Cyrenaica and the military government in the south This new appointment reflected the final success of the Italian army over the guerrilla fighters in Cyrenaica and the capturing of their leader, Omar el Mukhtar, who was executed at Soluk in Cyrenaica in 1932 The military administration was replaced by a civilian one and the Italian Government then proclaimed that Libya was an integral part of Italy "Nel 1938 le province settentrionali della Libya vennero proclamate part integrale del Regno d'Italia, mentre il Sud della Tripolitania, ed il Fezzan, vennero considerati Territorio Militare del Sud Tripolitania e Cirenaica vennero riunite sotto un'unica Amministrazione per la prima volta, sotto un unico Governatore (4) In fact this meant greater political and economic stability for Libya, so that the Italians could develop the country further Tripoli was more fortunate than Benghazi in having more urban development and greater town-planning achievements These were as follows -

1 Government buildings in the Shara el Shatt area for administrative offices (now the Libyan Government headquarters and Ministries)

2 A series of buildings for high officials and their families in the Passegiata Marescillo Balbo (now Adrian Pelt)

3 Other Government buildings constructed in Via Generale Emilio de Bono (now El Baladia Street)

4 Two estates constructed in 1936 to house the Italian workers in the Shara Bu Mengel in the Shara el Srim quarter and Shara Ben Ashur quarter and the construction of private multi-storey buildings in Corso Sicilia (now Shara Omar el Mukhtar Street) (5)

5 The creation of a new garden city by the wealthy Italian people in the Shara Ben Ashur quarter

The built-up area of Tripoli was developed in particular in its western and south-western sectors (known now as the Shara el Garbi and Shara el Srim), where new residential areas emerged to house the middle and working class families Also in the south-eastern sector, the wealthy Italians constructed their villas and gardens in "Città Giardino" (Garden City)

The total built-up area of Tripoli during the later Italian occupation was as follows (Fig 3 2) -

Table 3 1 The built-up area of Tripoli, 1932

		Area in hectares
1	The Old Town	32 8
2	The Menshia	31 0
3	The new sectors developed by the Italians	405 0
	Total	468 8

Source Field Work Study, Tripoli, 1966

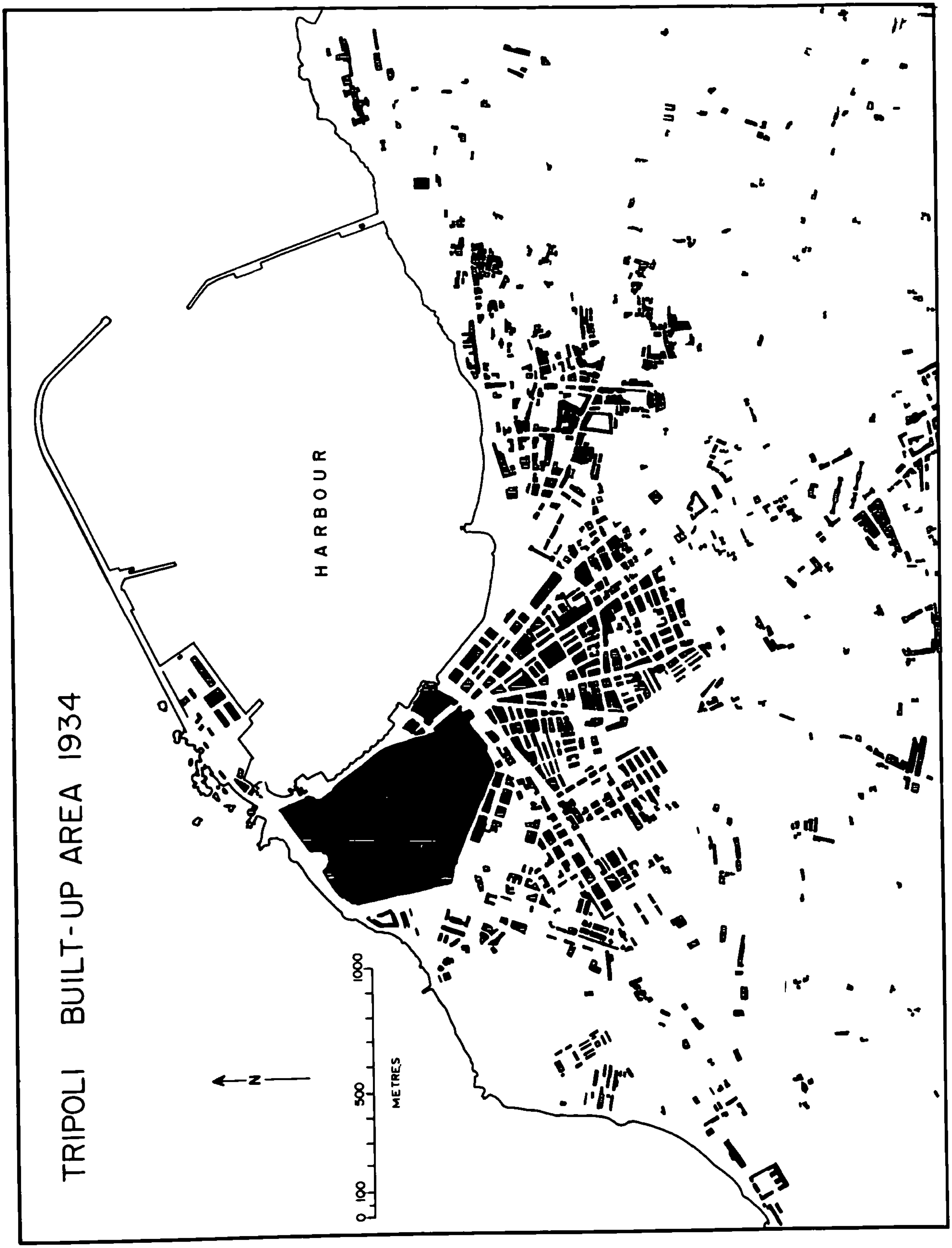
As far as the open spaces were concerned, the Italians kept the whole coastal area along the harbour as open land for recreation They established several gardens along these, extending from Tripoli port as far as the Del Mehari Hotel for a distance of three kilometres

Something must be said about the distribution of land use within the city of Tripoli during the recent Italian rule The land use forms can be classified as follows -

Modern Italian residential areas

These were established in several parts of the city, such

Figure 3 2



as the Shara el Garbi, the Shara el Srim, the Shara el Shatt, the Zawiet el Dahmani and "Città Giardino," and were characterized by the dominance of Italian settlers among the residents and a marked Italian architectural style They comprised an 'extensive (open) style' housing pattern in which the buildings usually have only two or three storeys and generally occupy only a very small part of the area Thus, population density was low, few people used each staircase and a high degree of privacy was possible Examples of this 'extensive type' of housing were found in the northern part of the Shara el Garbi and the Shara el Shatt

Another pattern of housing was the 'intensive (closed) type ' This type was characterized by buildings at least 4-5 storeys occupying a high percentage of the total areas in the Shara el Garbi and the eastern part of the Shara Mizran and Dahra quarters A third pattern was found in the Shara el Srim, where the houses were surrounded by one hectare of land and were designed especially for working class families

These new Italian sectors were almost entirely European in character and enjoyed many urban facilities

The commercial zone

This zone occupied the most compact built-up area in Tripoli It consisted of the major streets of the city, as for example, Corso Vittorio Emanuele, Via Lombardia, Via Roma, Via Lazio, Via Piemonte Corso Sicilia and Via Manzoni and the most modern super-market in Via Manzoni which specialized in the best quality groceries, meats, fish, etc The shops found along these streets were run by Italians and Jews They were built in Italian style, that is with large windows Food shops were confined mainly to Via Manzoni, whereas the other shops, e g drapers, chemists, hairdressers and stationers were located in the above-mentioned streets (6)

These shops flourished owing to the high demand for their goods by the growing Italian population Capital for the establishment of these shops and their trading activities was provided by Italians in Tripoli and by Italian banks The city became a commercial and shopping centre not only for the townspeople but also for the Italian farmers and others from the whole of Tripolitania.

Arab shops and markets were strictly confined to the Old Town and other Arab quarters The Italian administration made no allowance for any expansion of the Arab Suks and shops in the modern section of Tripoli Therefore, commercial segregation was strictly enforced

Industrial

There were three industrial areas within Tripoli The first one was located to the north-west of the city, between the Old Town and the Municipality stadium This area was characterized by light industries such as tobacco processing, furniture, building materials, etc The Italians developed this area for two main reasons (1) Remoteness from the residential zones and (2) Proximity to the harbour, which was especially important for the import of raw materials

The second industrial area was situated to the south of Tripoli at the Shara el Srim quarter, and was limited to mechanical engineering, car repairing and other works dependent on electricity It was located here because the area was sparsely populated and under-developed land was available

The third industrial area comprised agricultural processing plants to the south of the city at Ben Gashir gate several Italian premises for olive pressing, flour milling, macaroni processing and wine and spirit production The location of this area was governed by its excellent connections with both the coastal zone and the Jefara plain

Other soft drink factories were located in the Shara el Bay quarter, and the Berra Oea (Oea Brewery) was sited to the north of the Dahra quarter The printing industry was situated within the city at Via Geneva (now El Maktab Street)

Most of these factories were run by Italians, but some were run by Jews, both of whom invested large amounts of capital in order to maintain productivity The number of employees in these different industries totalled 2,000, the skilled labourer being Italians while the unskilled were mainly Arabs

It can be concluded that the Italians introduced many new industries to Tripoli These industries were dependent upon electricity which was unknown during the Turkish era In addition, the Italians introduced new technical skills into the traditional industries such as olive processing, thereby making them more efficient

Italian administrative buildings

From 1929 Tripoli was regarded as the administrative capital of the whole of Libya It was here that the Italian Governors had their residences and offices This construction of the Italian administration in Tripoli was based on the town's historical background, and the fact that it was the most active urban centre Its proximity to Italy, its greater contact with Europe than Benghazi, and its large fertile coastal zone were also of great importance

The Governor's office was in the castle, whereas the Government offices were situated in the Shara el Shatt (now the Libyan Government's Offices) Other administrative buildings were located at Corso Sicilia, Via Vittorio Emanuele and Shara Sayyidi In general, most of the administrative buildings were confined to the commercial zone and the sea coast, as was the site chosen by the local authority to be the administrative offices of the Municipality (Plate 3 3) This five storey building was well designed and sited near the public parks

Later (1939) the Italians were planning to transfer all the Government offices from the castle and other buildings to the Shara el Shatt, a better site overlooking the sea This emphasized the current trend that the administrative buildings, as well as the main headquarters of the Italian army, should be moved away from the noise and activity of the city centre

Italian defensive buildings

The Italian barracks were mainly located in the south of

Plate 3.3 Tripoli Municipality's building and the General Post Office at Algeria square

the city, e g at the Azizia gate there were three Others were found in Gurgi, Gargaresh, Shara el Shatt and Fashlum A large military hospital was constructed by the army to the south of the Ben Gashir Gate (Caneva Hospital)(now occupied by Social Insurance's Hospital) The army headquarters were situated within the city at Shara el Zawia (now occupied by the Women's Technical College), Dahra (now occupied by the Islamic University's administrative offices) and Via Vittorio Veneto (now occupied by the Preparatory School for Girls)

One aerodrome was constructed about 7 kilometres in the Mellaha area to the east of the city, and was entirely for military use, this aerodrome is now used exclusively by the American Air Force and called Wheelus Air Base Another was built at Castello Benito, 28 kilometres to the south of the city, this aerodrome is now used for military and civilian use

Public parks

These were created entirely by the Italians to provide Tripoli with green belts within the central business district Several parks of varying sizes extended along the coast between the port of Tripoli and the Mehari hotel The largest of these were the so called Municipality parks Smaller parks were also established in other sectors of the city Each park was carefully planted with Italian species of flowers and permanent grass

Two other parks were established on the middle zone and the outer zone of the city The first one was sited at the

Azizia Gate, and occupied an area of 25 hectares, and the second was located to the south-east of the Accara Gate, and occupied an area of 41 hectares These two public parks were closely planted with numerous trees of eucalyptus and other species

The broad tree-lined boulevards, in particular Longomare Conte Volpi, Passegiata Maresciallo Bodoligo and Corso Sicilia, were planted in an attempt to beautify the city

3 2 EFFECTS OF THE SECOND WORLD WAR

During the Second World War, the built-up area of Tripoli suffered heavily both from air raids and attacks by sea British destroyers bombarded the city in 1940 and at a later date Tripoli's harbour area, including the Old Town, suffered heavy bombing from British aircraft The French Air Force also carried out bombing raids on the city, and many residential areas suffered The harbour and Italian military installations were the main targets and they suffered heavy damage, whilst industrial areas were only slightly affected

Military operations against Tripoli continued even after the British occupation in 1943, for German air raids resulted in damage to several parts of the built-up area, especially the Belkheir and the Bab el Bahr quarters In terms of actual damage, therefore, Tripoli suffered a good deal It was estimated by high officials that the number of damaged dwellings was 1,281, but this figure was on a much smaller scale than at Benghazi in Cyrenaica

Many industrial premises were closed down owing to the cessation of supply of raw materials from Italy The only exceptions were manufacture of macaroni and olive oil processing Therefore many workers had to be dismissed In addition, commercial activities declined because import licences were very restricted The local authority had to provide the necessary supplies of food for both the citizens and the army. Ration books were distributed by the Italian Administration to permit people to obtain various necessities such as bread, flour, rice, macaroni, sugar and tea and Government licences for retailing food were issued

The local population also suffered in other ways Many people lost their lives and many more were injured Diseases spread, in particular tuberculosis and typhoid, owing to malnutrition and absence of medical treatment Migration from the city took place and many Italian settlers returned to their homeland, especially businessmen and civil servants, while Tripolitanian families migrated to Tunisia and Algeria In all, it was estimated that more than ten thousand left Tripoli during the war

Thus all aspects of urban life were greatly affected by the war, which lasted for five years. This period hampered all economic and social schemes, as well as the development of the built-up area

3 3 BRITISH OCCUPATION (1943-51)

The British army occupied Tripoli on 23rd January, 1943, and the British Military Administration ran Tripolitania until 1951 Under this administration, no urban development schemes were undertaken for several reasons "British policy was based on a "Care and Maintenance" basis, the aim of which was to carry on and enforce the laws and methods of the previous Italian Administration, with the exception of the then existing Fascist and racial laws "(7) This British policy did not allow for any importation of building materials and luxury articles into Tripoli These restrictions were enforced in order to retain Tripolitania "Military currency within the country "

Wealthy Italian people, particularly businessmen, had returned to Italy, and transferred their capital before the British occupation In addition, local capital in Tripoli was lacking Commercial banks were closed, as for instance, Banco di Sicilia, Banco di Napoli, Banco d'Italia, and Banco di Sparmi The only exception was Banco di Roma and its commercial activities were limited to saving accounts, opening personal accounts and limited foreign exchanges Jews who would normally have financed capital developments regarded the situation as unstable and did not care to risk their money in such activities

Also the drought of 1947, had a profoundly serious effect on commerce, industry and employment This was partly explained by the low demand for goods in the markets (people being mostly too poor to purchase them) and partly by the absence of sufficient capital for importation Industrial activities within the city suffered, especially those connected with agriculture such as the processing of grapes, dates, tobacco and the manufacture of macaroni Unemployment increased and the situation deteriorated through the migration of people from the rural areas to the city

These various factors hindered the further expansion of the built-up area and restricted the economic development of the city

3 4 IMPACT OF INDEPENDENCE

When Libya became an independent state in 1951, Tripoli, as the western capital of Libya, began to witness rejuvenated urban development This was explained partly by the more stable political situation and partly by the emergence of new economic and social forces within the city. They can be summarized as follows -

1 A great demand by the foreign diplomatic corps for buildings to house their embassies and also flats to accommodate their staff

2 A similar increase in demand was experienced by officials of the Federal Libyan Government

3 The Libyan Government released all the restrictions on the Italian banks, so commercial activities could be resumed

4 Restrictions on the import of building materials were removed, a factor which encouraged businessmen and wealthy

people to build new dwellings

5 The Municipality of Tripoli gave encouragement by not taxing new buildings for the first five years

6 Land values remained reasonable so that many people were encouraged to buy

7 The investment of foreign capital, particularly from America, Italy and other European countries, was encouraged This was used to build factories and other commercial ventures

8 The wealthy Jews as well as the Italians played a great role in the urban development by financing building programmes

These various factors resulted in a vast increase in the density and size of the built-up area, with much infilling and expansion in many directions, in particular in the western and the southern sectors New private buildings of 2-3 storeys were constructed in the Mizran and the Shara Ben Ashur quarters, whereas other new villas were built in Garden City and Giorgimpopoli Lack of money and the absence of enthusiasm on the part of the Municipality of Tripoli and Tripolitanian Administration meant that no new government buildings were erected The Central Libyan Government occupied the buildings which had previously housed the Italian Administration

Commerce and industry revived, many new shops were opened, new factories began production, and Tripoli's port activities were renewed

3 5 IMPACT OF OIL

Exploration for oil in 1956 in Libya, oil discoveries in 1959 and oil production in 1961, had a great impact on the economy of the city as well as on the urban development in various parts of the city Most of these oil companies had their headquarters in the central business district (see Chapter 8) The total amount of money spent on such oil discoveries was as follows -

Table 3 2 Total Expenditure of Concession Holding Oil Companies (1956-1967)

Year	Annual Expenditure in £L'000	
1956	4,500	
1957	13,500	
1958	24,000	
1959	35,000	
1960	61,000	
1961	72,000	
1962	86,000	
1963	57,700	
1964	75,918	
1965	80,536	
1966	80,312	
1967	95,911	excluding January & February
Total	686,877	

Source Ministry of Petroleum Affairs, Tripoli, 1968

The expenditure of oil companies rose from 1956 and reached its highest figure in 1967 They declined in 1963 because of a slow down in oil exploration, but the expenditures rose again in 1964 onwards due to new discoveries of oil in Cyrenaica by B P and Occidental Oil Companies in Sarir and Idris fields respectively Some of the money listed in Table 3 2 was not spent within Libya itself Table 3 3 lists the expenditure of oil companies entirely within Libya for a 4-year period - the only such statistics available -

Table 3 3 Local expenses of Concession Holding Oil Companies for Oil Operation in Libya (1964-1967)
(in £L'000)

Year	No of companies included	Salaries and wages	Contract of Transport Companies	Materials and supplies	Food expenses	Other expenses	Total
1964	19	4,385	26,450	10,105	504	4,660	46,104
1965	21	4,698	30,299	12,545	268	2,900	50,710
1966	21	6,234	24,472	10,319	472	7,054	48,551
1967	26	4,610	25,626	6,613	716	5,718	43,283

Source Economic Research Division of the Bank of Libya, Economic Bulletin, July-August, 1968, Table 31

The local expenses of oil companies contributed considerabl to the economy of Libya in general and Tripoli in particular Contracts for transport services represented the highest expenditure, followed by building materials, and salaries and wages paid to Libyan employees

The number of Libyan employees working in oil companies was 6,000 in 1959, 7,000 in 1961, 8,150 in 1962 and 9,600 in 1968 (8)

Oil discoveries did not only affect the Libyan economy directly in terms of revenue and other local expenses of the oil companies but also indirectly in terms of expansion of the built-up area within Tripoli. The latter was mainly due to the high demand for houses and offices for the oil employees Many of the buildings constructed in the Dahra quarter near the Royal Palace "Kasr el Khold el Amer," had five storeys The Shara Ben Ashur quarter is characterized by four family dwellings One family houses were constructed in Giorgimpopoli, Gurgi and Gargaresh Other construction activities were introduced

Much previously cultivated land in many parts of the city was taken over for these private building activities Low priced land gave encouragement to many investors and builders Therefore the additional built-up area within the city increased rapidly and totalled 103 7 hectares in 1966 Decline of building activities (villas and flats) in 1962 can be explained partly by the reduced demand for houses and partly by the new Libyan restrictions imposed on the Italian firms and individuals The building climax was reached in 1964, when there was a peak demand for houses and flats by the Libyan Government and oil companies

Popular houses (Traditional houses)

The construction of these houses began as early as 1952, and they increased rapidly in number from 1953 onwards This resulted in expansion of the built-up area of traditional houses to 35 4 hectares Construction took place in many sectors of the middle zone and the outer zone of Tripoli especially in Shara el Kebir, Shara el Zawia, Shara Ben Ashur, Gurgi and Gargaresh Here the houses were built and designed almost entirely in the Arab style of architecture, except a few of Italian design They generally consist of one storey with several rooms and courtyards Between 1955-1966, 2,791 houses were built containing 3,309 dwellings[9] (Fig 3 3)

No overall town plan existed, and many houses were built without legal permission from the Municipal Architecture Department Therefore, urban facilities such as running water, sewerage system, electricity and transport services were either absent or deficient (Plates 3 4 and 5) Most of the occupants were Tripolitanian families returning from Tunisia, others were rural migrants and working class mostly from the Old Town

The extension of the built-up area took place, either at the expense of the agricultural lands or of open spaces within the city The need for housing can be explained partly by the increase of population and spread of affluence as well as the low cost of building materials and the cheap land in the suburbs of the city Construction was undertaken mainly by the land owner himself, but in some cases, building was achieved by the

Plate 3.4 Traditional houses in Ras Hassan (Ben Ashur quarter)

Plate 3.5 Traditional houses in Gott el Shaal (Gargaresh Quarter)

hiring of skilled and unskilled labour on a daily basis

Villas

The construction of the villas also added substantially to the size of the built-up area, especially in the western and the southern parts of Tripoli The total area covered by the villas reached 47 3 hectares in 1966 A rapid increase in the number of new villas occurred from 1956 onwards as a result of the impact of oil discoveries, but some years show fluctuations The number of villas constructed in the 11 years (1956-1966) was 1,284 [10] They were built mostly in Giorgimpopoli, Gurgi, Gargaresh, and the Shara Ben Ashur quarter Most of the occupants were American and British families as well as families of foreign diplomatic staff Very few Libyans and high official resided here

Multi-storeyed buildings

The construction of new multi-storeyed buildings occupying an area of 19 6 hectares in the central business district increased the density of the built-up area These buildings, financed by wealthy Libyans and Jews, were erected on open spaces or on sites which had previously contained Turkish houses They were built in different parts of the city with a special concentration in the main streets of the city centre such as the Shara 24 December, the Shara el Malika, Haiti and Baghdad (Plates 3 6 and 7) These buildings consisted of five storeys and numbered 284 (1956-1966).[11] Fig 3 3 shows that there were fluctuations in construction, but the impetus

Figure 3 3

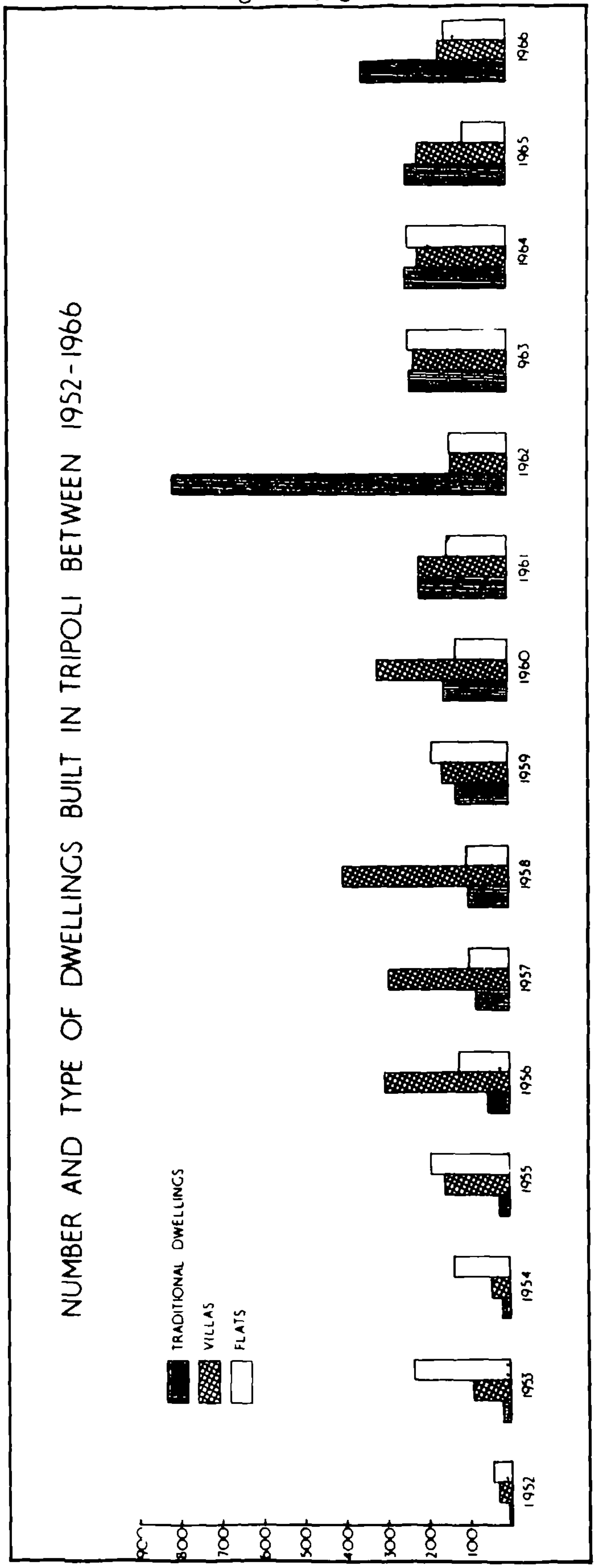

NUMBER AND TYPE OF DWELLINGS BUILT IN TRIPOLI BETWEEN 1952-1966
TRADITIONAL DWELLINGS
VILLAS
FLATS
100
200
300
400
500
600
700
800
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
963
1964
1965
1966

Plate 3.6 Modern Tripoli : south-eastern part of the central business district

Plate 3.7 Modern Tripoli : northern part of the central business district near the harbour

occurred from 1956 onwards as a result of the oil discoveries

Public buildings

The Tripolitanian Administration from 1951-1963 built only three primary schools, in the Omar el Mukhtar Street and the Shara el Zawia and the Dahra quarters This relatively low number resulted from a lack of capital, due to the vast demands made by salaries, and to the absence of town planning

From 1963 onwards, some public development was undertaken by the Central Libyan Government in Omar el Mukhtar and Shara el Shatt Streets Here the Government erected five tall office buildings for administrative purposes in the Shara el Shatt quarter, while other development in Omar el Mukhtar Street was solely for the residential use of the Government officials The small scale of public development was substantially due to the decision of the Central Libyan Government to build a new capital in Beida in Cyrenaica More than forty million pounds was spent on the construction of villas, blocks of offices and other civic projects in Beida, and the creation and development of this new capital was reflected in the neglect of Tripoli (see Chapter 4).

During the period 1956-1966 Tripoli's commercial zone grew in size New shops and supermarkets as well as other commercial enterprises emerged as a response to a great increase in demand More goods were imported into Tripoli for retailing within the city Consumer goods, in particular cars, refrigerators and other luxury articles became readily available Also the requirements of the oil companies' camps and oil fields in the desert led to the importation of many new kinds of goods

These various kinds of commercial activities resulted in the expansion of premises in the central business district of the city, e g in the 24 December and Omar el Mukhtar Streets A new shopping centre was established in Giorgimpopoli estate where the exclusive residential area was situated

The local traditional shopping centre in the Shara el Rashid and the Shara el Maamun became very active This was mainly due to the availability of foodstuffs which attracted an increasing number of rural people to come into Tripoli to shop Thus many new shops for both wholesaling and retailing developed and expanded Most of the shopkeepers were Libyans, but some were Jewish merchants

The Italian banks, such as Banco di Napoli and Banco di Sicilia, resumed their activities and other new banks were established as for instance, the Arab Bank, Misr Bank, the Middle East Bank (now North Africa Bank), the Commercial Bank and Sahara Bank All these banks greatly contributed to the growth of the city's economy

From 1956, industrial activities increased considerably with the establishment of more than thirty plants both in the city centre and the periphery The capital came from both local sources and foreign investments, the former being especially encouraged by government loans which were readily available for industrial development As incentives to industrial development, high tariffs were imposed on foreign goods which competed with those produced by the local industries The most important plants were tomato processing in Gurgi, flour milling in Sidi Mesri, and the manufacture of matches in Gurgi Several small factories were also established in the Ben Gashir area Other large firms were created in the Suani Road Most factories and industrial firms were located where land was relatively cheap especially where it had low agricultural productivity

This increase in industrialization was reflected in the increase in the number of workers from 1,527 in 1954 to 9,049 in 1967 (12)

In the ten years from 1954-1964 the population of Tripoli increased from 130,238 to 212,577 (13) This 82,339 increase can be explained partly by the immigration of the rural people to the city and partly by the return of more than ten thousand Tripolitanians mainly from Tunisia The Italians decreased by 10,758 for the same period, while the Jews increased by 589 Other aliens increased by 465

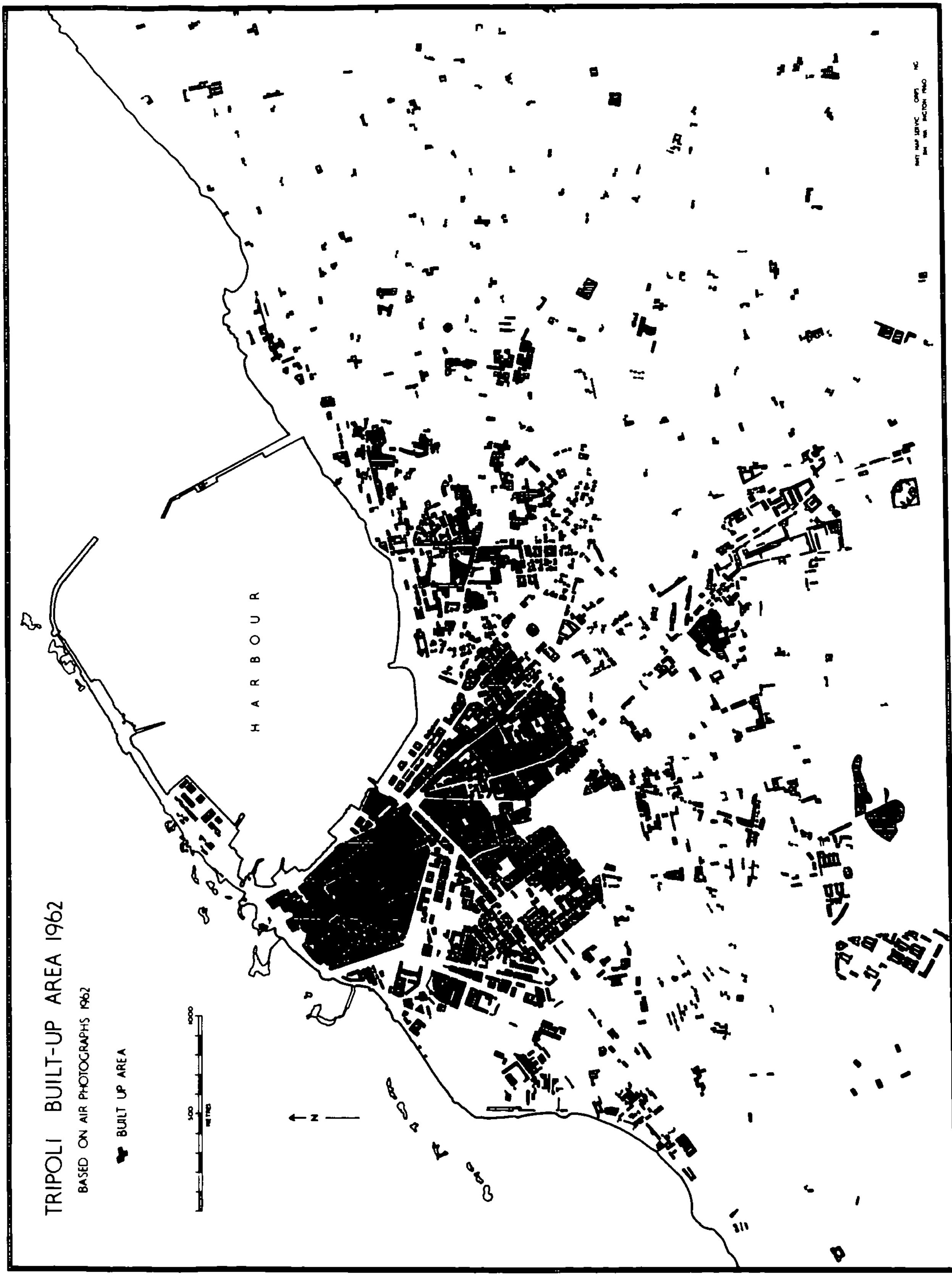
There was also a redistribution of the local inhabitants within the various quarters of the city Great increases in population occurred in certain quarters such as the Shara Ben Ashur, Shara el Garbi, Gargaresh and Shanty Town Other quarters, as for instance Bab el Bahr, Homet Garian, Kushat el Suffar and Mahallet el Baladia experienced a decline Thus the population movement tended to be towards the middle zone and the outer zone of Tripoli (see Chapter 7)

CONCLUSION

Tripoli developed from a small Arab town to a large colonial town during the Italian occupation The built-up area was enlarged from 63 hectares to 468 hectares in 1939 The main redevelopment of the city took place in the Menshia and within the new Italian walls Here the Italian created a new European type city of Italian architectural design, in great contrast to the mediaeval Arab town

Most developments of the immediate post independence period took the form of infilling The rapid development from 1956 onwards, was a consequence of the economic and social implications of oil discoveries and production A new built-up area has emerged on the western, south-eastern and southern parts of the city (Fig 3 4)

Figure 3 4


TRIPOLI BUILT-UP AREA 1962
BASED ON AIR PHOTOGRAPHS 1962
BUILT UP AREA
HARBOUR
N
500
1000
METRES

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CHAPTER IV

POLITICAL AND ECONOMIC FUNCTIONS

Tripoli has two predominant functions, political and economic The former is derived from the fact that the city is still functioning as the western capital of Libya The latter is stronger than the political function

It is important to examine the economic functions of Tripoli as they represent the most important aspects of the present day city There are several factors which underlie the growth of these economic and political functions of Tripoli First, aspects of the historical background of the political and economic circumstances since the Phoenician period, are important Second, the Italian colonization which created new functions in the city Third, the port of Tripoli plays a significant role in the trade of the city and its region in Tripolitania Fourth, the concentration of a quarter of a million population stimulates trade and commercial activities within the shopping centre In addition, the central business district with its various commercial and business activities has grown tremendously since 1956 owing to the impact of oil and the resulting flow of foreign capital to the city Fifth, the industrialization which took place in recent years played an important role in increasing employment in the industrial firms of Tripoli as well as in increasing commercial activities in the shopping areas Finally, the population and economic growth of the city resulted in creation of various services such as transport and other entertainment facilities within the city

All these factors encouraged secondary and tertiary activities to grow It is calculated by the writer that about 10 8 per cent of the total active population of the Muqataa of Tripoli are engaged in commerce, 10 9 per cent in manufacture, 9 2 per cent in transport and 27.8 per cent in various services (see Chapter 7)

Owing to the significant role of these functions, a detailed aralysis is needed for a full understanding of the political, commercial and industrial functions of the city All these functions will be examined in the following chapter

4 1 POLITICAL FUNCTION

Tripoli, as the largest city in Libya, functions both as national and regional capital Constitutionally, the city is still the capital of Tripolitania and is recognized as such by the Central Libyan Government There are plans,however,to create a new national capital at Beida, and work began on this project in 1956 Despite this, Tripoli remains Libya's most important city and still contains many central government ministries and other related offices

Libya is the only country in the Arab world which has two capitals This duality of the political function of the seat of the Libyan government reflected the rivalry between the two main regions, namely Tripolitania and Cyrenaica Thus the Libyan constitution stipulated the existence of two capitals for the country, Tripoli and Benghazi, in order to justify the divergent political ambitions of the two regions (Fig 4 1)

This duality of the political function remained from 1951-1959 In 1960, Benghazi ceased to function as the eastern capital of Libya and was replaced by Beida, although the transfer of this political function to Beida was neither announced by the government nor stipulated in the constitution The construction works in Beida were initiated as early as 1956 when the Libyan Federal Government started to consider Beida as a summer residence for Libyan ministers From 1959 onwards, the cabinet began to meet regularly in Beida and all government announcements and decisions were made there Moreover, the Libyan parliament started to hold its meetings in Beida from 1963 when the parliament buildings were completed

In addition, Beida accommodates the following ministries and offices -

Figure 4 1

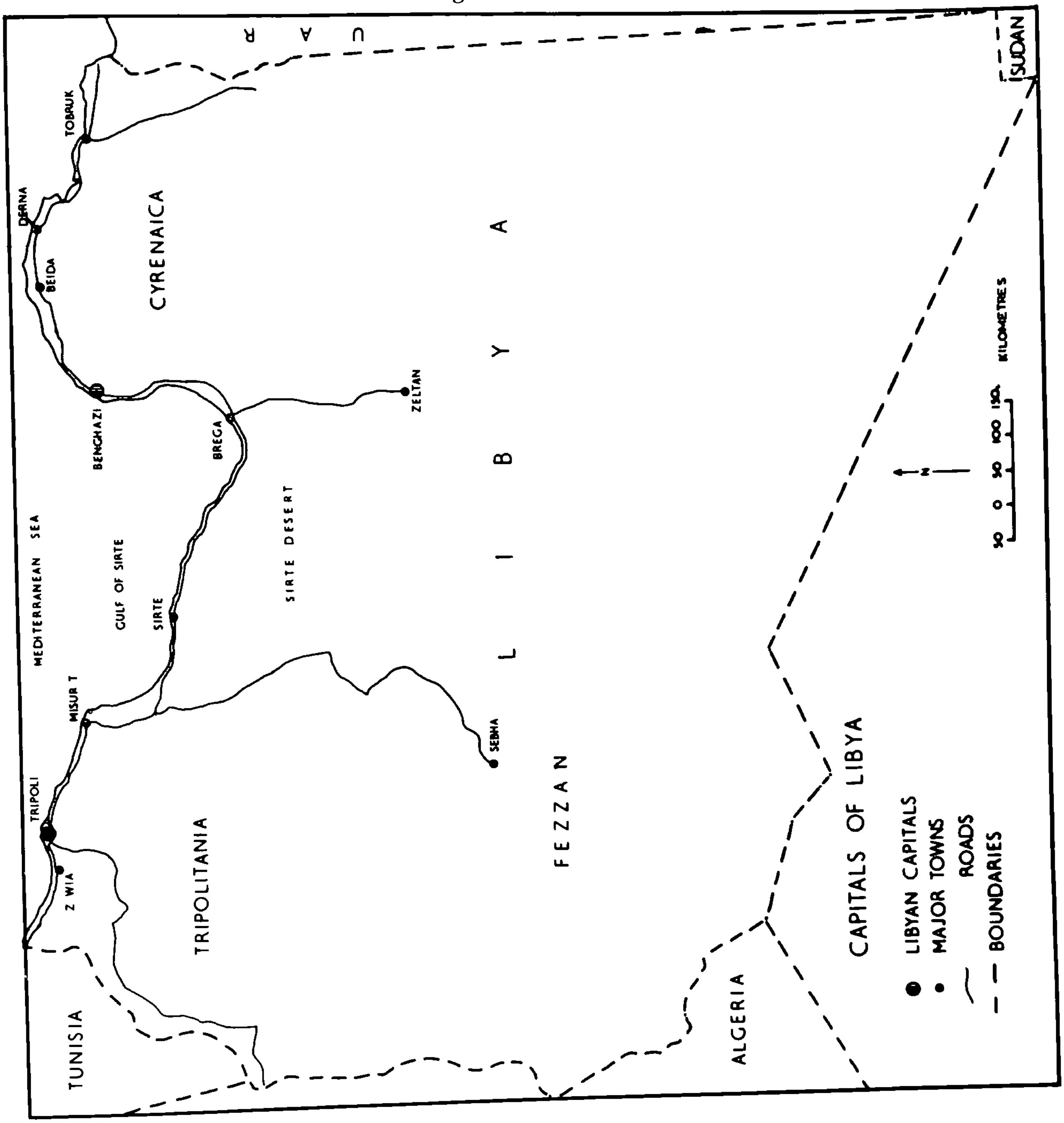

CAPITALS OF LIBYA
LIBYAN CAPITALS
MAJOR TOWNS
ROADS
BOUNDARIES
KILOMETRES
50 0 50 100 150
N
U A R
SUDAN
L I B Y A
TOBRUK
DERNA
BEIDA
CYRENAICA
BENGHAZI
BREGA
ZELTAN
MEDITERRANEAN SEA
GULF OF SIRTE
SIRTE
SIRTE DESERT
MISUR T
TRIPOLI
Z WIA
SEBHA
TRIPOLITANIA
FEZZAN
TUNISIA
ALGERIA

Table 4 1 Number of the main ministries in Beida, 1968

Prime Minister's Office

Ministry of State for the Prime Minister's Office

" " " " " Parliament Affairs

" " " " " Foreign Affairs

" " " " " Defence

" " " " " Justice

Other ministries are under construction

Beida is situated on the Jebel el Akhdar ("Green mountain") in Cyrenaica, 800 kilometres above sea-level The town had a population of 12,164 in 1964 Beida is the administrative centre of the whole "Muqataa" province of the Jebel el Akhdar Before 1956 the town was a very small urban centre and its only significance was the existence of the Islamic University From 1956 onwards the town began to experience a rapid growth owing to the policy of the Libyan government to expand its urban growth in order to accommodate its offices

It is estimated that the amount spent in Beida on public buildings was £L 40 millions between 1956-1966 Furthermore, in 1966, the Central Libyan Government was planning to spend £L 38 millions more on construction of further public buildings and other civic services The private sector is also expected to spend about £L 19 millions in the ten years 1966-1976 on private buildings such as villas and multi-storey blocks [1] It is noteworthy that the government encourages the private sector to invest in the urban development of Beida The government, for instance, offers for sale uncultivated land at very low prices to Cyrenaican businessmen in order to encourage them to buy land It also provides long loans through the Industrial and Real Estate Bank so that the owners of the new land can construct villas and flats within the town

It is expected that by 1978 the public and private expenditure on Beida's urban development will amount to £L 97 millions Thus in ten years' time Beida will be a new capital of Libya, like Brazilia in Brazil It will be the first new town in Libya planned on a modern master plan The town will accommodate between 80,000-100,000 people in 1990 [2]

There are political reasons behind the intentions of the Libyan government to spend huge sums of money on the urban development of Beida Firstly, the government wants its future capital to be away from the two rival cities of Tripoli and Benghazi Secondly, Beida will be somewhat removed from likely political unrest or military intervention in the future Thirdly, Cyrenaica will gain further political powers in exercising both internal and external policy of Libya Fourthly it will be less subjected to foreign political influence

However, although Beida has had 12 years of urban development, it has so far only attracted investments in real estate, but not in commerce or industry Even Cyrenaican businessmen are extremely cautious to do so, owing to uncertainty about the future of Beida

In contrast to Beida, Tripoli is a more "natural" capital and has many geographical advantages Firstly, its geographical site is more favourable because it is situated on the Mediterranean coast with its good harbour and port Secondly, the city hinterland is more cultivated, supplying the city with all its agricultural needs such as vegetables, fruits, etc Thirdly, there is a high concentration of commercial, business and industrial activities Fourthly, Tripoli has about one quarter of a million people, and is a more socially and culturally advanced city Finally, Tripoli is the symbol of emerging new Libya Here the foreign visitors and tourists can get the actual picture of the new Libya

At the present time Tripoli is still partly functioning as the western capital of Libya In other words, the central government has some permanent offices in the city, such as various ministries, although the regular weekly meetings of the Libyan cabinet take place in Beida and not in Tripoli

It is interesting to note that the majority of the government buildings in Tripoli are either old ex-Italian offices or rented from the private sector There are only three multi-storey buildings erected by the government in 1963 They are now occupied by the Ministry of Economy and Trade, the Ministry of Finance and the Ministry of Information and Culture There are economic reasons behind the reluctance of the government to build more offices in Tripoli, in particular the Libyan government does not want to spend money in Tripoli on construction of public buildings at the expense of Beida

Table 4 2 Distribution of the Libyan Ministries in Tripoli, 1968

	Ministry	Location
1	Finance	East of CBD
2	Planning and Development	"
3	Industry	"
4	Economy and Trade	"
5	Information and Culture	"
6	Municipality Affairs	"
7	Education	CBD
8	Housing and Government Property	CBD
9	Public Works	CBD
10	Tourism	CBD
11	Social Affairs	CBD (The Core)
12	Interior	" "
13	Health	Outside of the CBD
14	Communications	" "
15	Youth and Sport	" "
16	Agriculture	" "

Source Field Work Survey, Tripoli, 1967

This table indicates clearly that there are twelve ministries located within the CBD representing about two-thirds of the existing ministries, whereas only four ministries are sited outside of the CBD

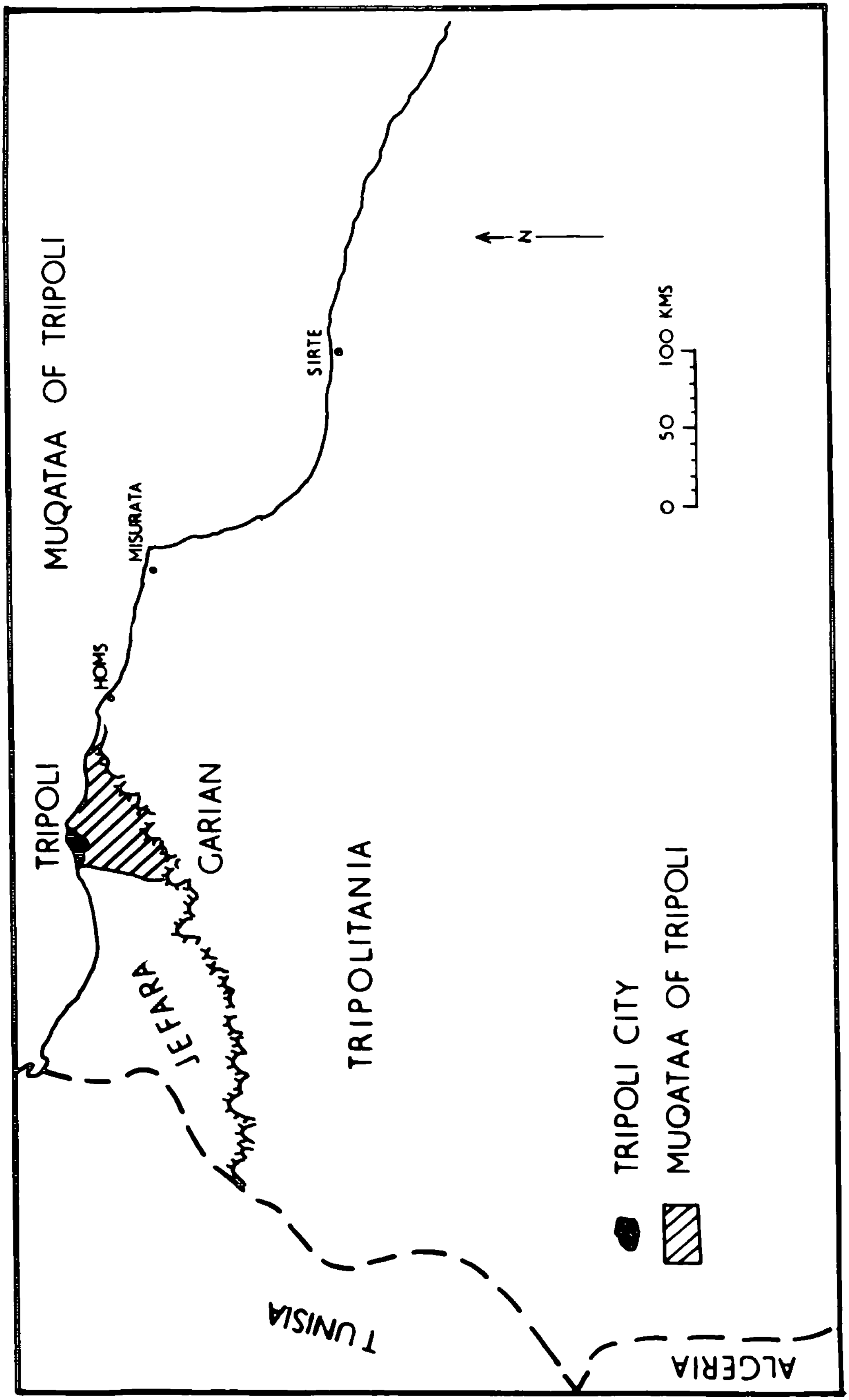
It is important to note that there is a tendency on the part of the central Libyan government to rent multi-storey offices outside the CBD away from noise, heavy traffic and residential areas

The majority of foreign embassies are located in the Garden City near the Royal Palace The remainder are situated in the Adrian Pelt Street along the sea-side, and within the upper class residential area of the Shara Ben Ashur quarter Foreign embassies, whose number is about 30, are reluctant to move their offices to Beida owing to housing shortage and lack of entertainment facilities Only a few embassies have additional offices in Beida, e g U K , U S A , France, U S S R , and U A R

Apart from the political function of Tripoli, the city is the largest urban centre in Tripolitania, and it has the administrative headquarters of the Tripoli Muqataa (province) which is to be considered the most populous Muqataa in Libya (Fig 4 2) It has a population of 379,925, representing 24 3 per cent of the total population of Libya (1,564,369 in 1964) (3 This administrative function is exercised through the Muqataa council which consists of 20 members appointed by the Ministry of the Interior In addition, Tripoli is the headquarters of Tripoli Municipality as well as other institutions and social organizations (Plate 3 3)

The 15 police stations are distributed within the central business district, middle and outer zones There is only one police station within the Old Town Eight of these police stations were established during the Italian rule The rest were established during the British Administration and the

Figure 4 2


MUQATAA OF TRIPOLI
TRIPOLI
HOMS
MISURATA
SIRTE
GARIAN
JEFARA
TRIPOLITANIA
TUNISIA
ALGERIA
N
0
50
100 KMS
TRIPOLI CITY
MUQATAA OF TRIPOLI

post Independence period owing to population increase and for security purposes There is only one fire station located near Ben Gashir Gate

There are 12 local post offices, the main one is located at Algeria Square The remainder are sited within the central business district which has six post offices The other five post offices are situated within the middle zone, whereas the outer zone has only one, located in Giorgimpopoli, serving the upper class residential area

Generally speaking, although the economic function of Tripoli is growing, its political role is declining Therefore the present political function is to prepare the way for Beida to be the new capital of Libya This aim will be achieved when all urban development schemes are completed within Beida

4 2 THE COMMERCIAL FUNCTION

Commerce is the most important function of Tripoli This is primarily related to the fact that the city is the largest service centre in Tripolitania, serving not only the city itself and its regions, but also Cyrenaica and Fezzan There are many factors underlying the commercial importance of the city The most significant one is the high capital investment in the commercial sector of the city The second factor is due to the fact that the city has the highest number of people working in trade in Libya Here the total number of people engaged in trade activities, whether it is wholesaling or retailing, was 10,370 in 1964, of which 8,751 were Libyans, representing 84 3 per cent of the total, and the remainder were Italians and Jews

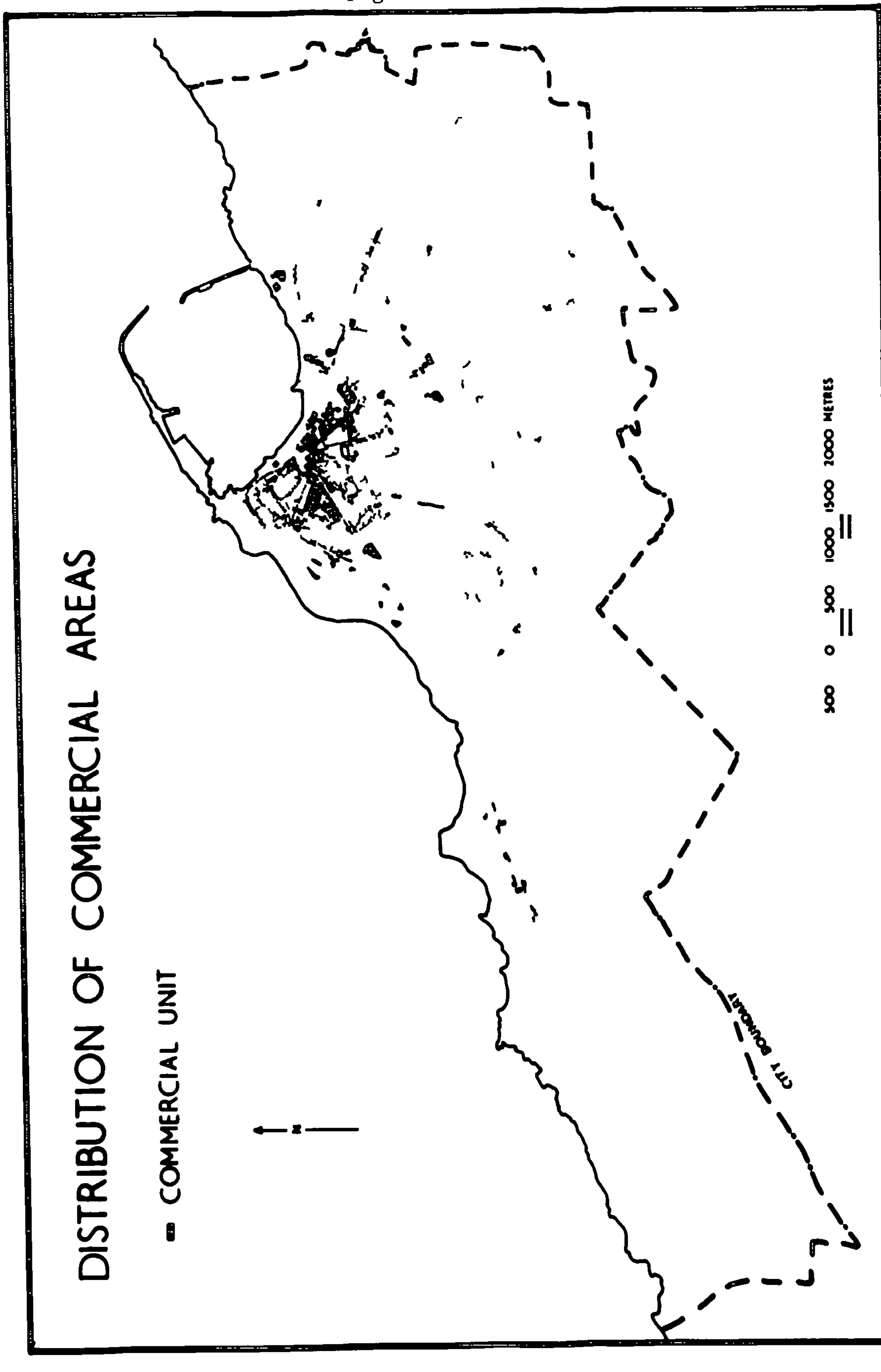
Retail Trade

The retail activities cover the whole of the central business district of Tripoli and can be divided into two traditional suks and modern shops (Fig 4 3)

(A) Traditional suks (Markets). These are situated in the southern and south-eastern parts of the Old Town They are numerous and have existed since the beginning of the Arab era in Libya They flourished during the Turkish rule and survived the Italian occupation At the present time they are still functioning commercially and attracting customers from all parts of the city (Fig 4 4)

A survey conducted by the writer on 64 samples within different traditional Arab shops reveals that the average rent for each of these is £L 5 10 0d per month The highest rent is £L 32 0.0d in the foodstuff shopping area of the Old Town The lowest rent is £L 1 0 0d in the Suk of Rubaa It is noteworthy that about 90 per cent of these shops are Waqf property (dedicated to Moslem religious, cultural or charitable institutions)

Figure 4 3



DISTRIBUTION OF COMMERCIAL AREAS
COMMERCIAL UNIT
N
500 0 500 1000 1500 2000 METRES
CITY BOUNDARY

Figure 4 4

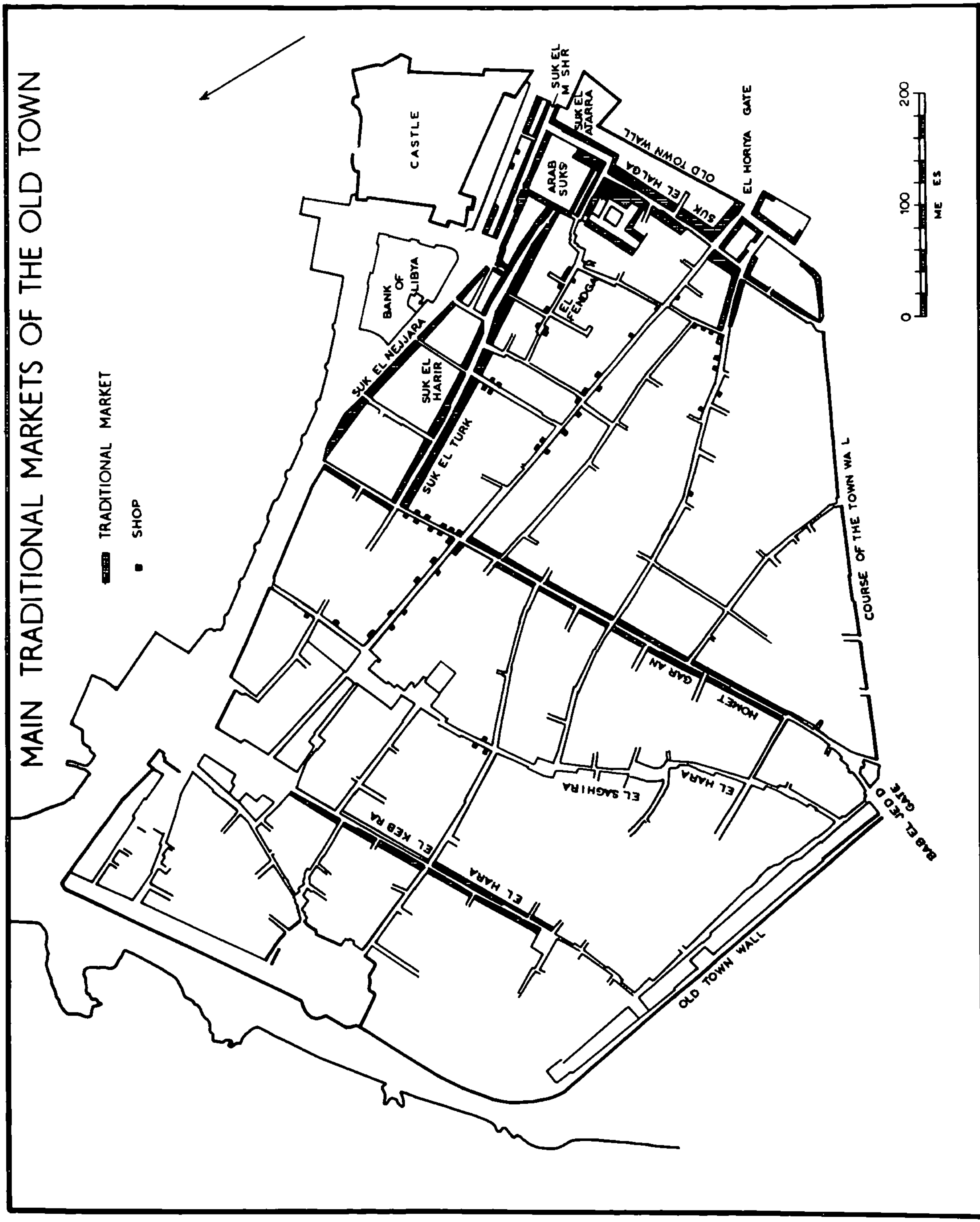

MAIN TRADITIONAL MARKETS OF THE OLD TOWN
TRADITIONAL MARKET
SHOP
CASTLE
BANK OF LIBYA
SUK EL NEJJARA
SUK EL HARIR
SUK EL TURK
EL FENDGA
ARAB SUKS
SUK EL M SHR
SUK EL ATARRA
OLD TOWN WALL
SUK EL HALGA
EL HORIYA GATE
COURSE OF THE TOWN WA L
HOMET GAR AN
EL HARA EL SAGHIRA
EL HARA EL KEB RA
BAB EL JED D GATE
OLD TOWN WALL
0
100
200
ME ES

Table 4 3 Ownership of Shops in the Old Town, 1966-67

Suk	Arabs	Jews	Total
Suk el Rubaa	48	-	48
Suk el Nessa	76	-	76
Suk el Leffa	66	-	66
Suk el Siagga & Attara	90	6	96
Suk el Halga	55	-	55
Suk Bal el Horiyah	66	4	70
Suk el Mushir	55	4	59
Suk el Turk	93	7	100
Suk el Nejjara	26	4	30
Total	575	25	600

Source Field Work Survey (1966-1967)

Table 4 3 reveals that the majority of the shopkeepers are Libyan Arabs, representing 92 5 per cent, whereas the Jews constitute 7 5 per cent This is primarily due to the fact that the Libyan shopkeepers deal with the traditional Libyan goods which attract more rural customers The Jewish shop-keepers deal generally with ready-made clothes, European textile and accessories for both men and women, as well as jewellery Their number has decreased in recent years primarily because of mobility to the modern shopping centre, and, secondarily, because of departures to Israel No Italian merchants are found in the suks of the Old Town, because they prefer to have their shops in the modern sector

Suk el Rubaa is one of the most important traditional markets It is situated to the north of Ahmed Basha's mosque. Here the Suk is covered by an arched roof - of typical Arab design - and contained 48 open-fronted shops The average floor area of the shop is 6 sq metres Each shop has a "mastabah" which is designed to be used as a sitting place for the shopkeeper and for displaying his goods Both the mastabah and ground floor are covered by a small size carpet The goods are either kept in drawers or displayed at the front of the shop The Suk el Rubaa specializes in selling women 'barracans' made of cotton or silk, oriental gifts and souvenirs (Plate 4 1)

Suk el Nessa is another traditional market, containing 76 shops which specialize generally in silk barracans The suk draws most of its customers from the city itself, because silk barracans are demanded only by the urban women who wear the most sophisticated textiles

Suk el Leffa is larger than the previous two suks and has 66 shops The average floor area is 6 sq metres The suk shops specialize generally in wool barracans for men and women as well as wool blankets The customers of the suk are drawn from both the city and rural areas alike (Plate 4 2)

All these suks are still maintaining their traditional ways of commerce For example, the intensive commercial

Plate 4.1 Traditional Libyan market : Suk el Rubaa

Plate 4.2 Traditional Libyan market : Suk el Leffa

activities of the suks take place in the morning between 10 a m. to 1 p m , and decrease during the afternoons and evenings Also the suks' activities are intensified during winter and summer months when the rural people come for shopping These traditional suks also attract foreign tourists interested in local handicrafts and oriental gifts

Shops selling silver, gold and jewels are also situated in this area and are located in the Suk el Siagga and the Suk el Attara These suks were established by Jewish smiths in the late nineteenth century and were expanded during the Italian rule and after oil discoveries of 1956 There are 93 of these shops, situated along two streets Each shop within the suk has a small show window The average floor area is 8 sq metres Potential customers are drawn from the city and the rural areas of Tripolitania The commercial activities cease only on Friday afternoons

Suk el Halga is located to the west of the previous suks Its 55 shops have floor areas from 10 to 30 sq metres These shops are open fronted with shutters They specialize in various foreign textile goods (cotton, silk, rayon, etc) The customers are drawn from all different income groups of the city as well as the rural areas

Suk el Horiyah is situated close to the Horiyah gate Most of the suk shops specialize in selling spices, hardware, household articles, as well as low priced footwear This suk contains 70 shops of various floor areas ranging from 10 to

20 sq metres The suk shops draw their customers from the low income groups who seek low priced goods

Suk el Mushir is located to the east of Ahmed Basha's mosque This suk was established by the Turkish Administration during the nineteenth century It contains 59 shops, most of which are modernized with show windows by the shopkeepers The average floor area is between 10-16 sq metres The shops generally specialize in ready-made clothes and accessories for men, as well as textiles, suitcases, bags and other oriental luxury gifts

Suk el Turk is another traditional market located to the north of the previous suk It was established by Tripoli merchants during the Turkish rule It is a typical example of Turkish architectural design containing 100 shops varying in specialization, i e ready-made clothes, linen, women's dresses, footwear, watches, and men's accessories The majority of these goods are imported from East European countries and Hong Kong (Plate 4 3)

The customers of both suks are drawn from all parts of the city as well as from the rural areas of Tripolitania This is primarily due to the fact that the prices of goods are cheaper than most found in the modern shopping centre

Suk el Nejjara is sited to the east of the Suk el Turk It contains 30 shops located along one side of the Suk Shops are open-fronted and they specialize generally in selling building and painting materials Their customers are drawn

Plate 4.3 Traditional Libyan market : Suk el Turk

Plate 4.4 Traditional Libyan market : Suk el Nejjara

from all parts of the city (Plate 4 4)

In addition, there are small Arab suks within the shopping area of the Old Town They have no particular specialization, and shopkeepers sell different kinds of goods, i e foodstuffs, butchers' meat, ready-made clothes, textiles, footwear, etc

(B) The modern shopping centre is situated to the south of the traditional commercial area It comprises all major commercial streets of the modern sector (Plates 4 5 and 6) Most of the commercial activities take place within this part of the city This is primarily due to a variety of factors Firstly, the modern shopping area lies between the Old Town to the north and the residential areas to the south This nucleation is of great commercial value to the shopping area because it draws its potential customers from all parts of the city Secondly, the bulk of the traffic movement takes place within this area, due to wide streets Thirdly, all commercial firms, banks, insurance offices, etc are located here Fourthly, the economic factors are also of particular importance, such as high capital invested in modern shops Fifthly, all types of consumer goods are found within the modern sector Finally, all social amenities and places of entertainment, such as cinemas, night clubs, etc are located within the modern shopping area

This shopping centre of the modern sector can be classified into two types (a) retail, and (b) wholesale trading The former is the [most] predominant commercial activity within the modern sector, and comprises more than three-quarters of the commerce Here the retail trade shops number 1,306 representing 35 8 per cent of the total number of retail shops within the whole city (3,642 shops)

Table 4 4 Ownership of shops within the modern shopping area 1967

Kind of business	Libyan Arabs	Italians	Jews	Total
Ready-made clothes and textiles	117	-	27	144
Electrical appliances, radios, tape recorders, refrigerators, etc	106	10	3	119
Machinery and equipment	78	26	13	117
Furniture	58	5	8	71
Oriental gifts	48	6	12	66
Photography and cameras	4	6	4	14
Stationers	30	6	4	40
Cosmetics	21	5	8	34
Toys	22	5	1	28
Plastic materials, household utensils, china and crockery	42	3	-	45
Chemical products	32	13	9	54
Chemists	22	4	-	26
Building material and sanitary ware	57	14	8	79
Flowers	5	4	-	9
Greengroceries	41	4	-	45
Butchers	76	4	1	81
Fishmongers	16	2	-	18
Foodstuffs	185	13	24	222
Supermarkets	3	-	-	3
Wine shops	-	34	17	51
Confectioners	30	7	3	40
Total	993	171	142	1,306

Source Field Work Survey (1966-1967)

Table 4 4 shows that the majority of the retail shop-keepers are Libyans who represent 76 0 per cent, whereas the Italians and Jews constitute 13 9 and 10 1 per cent respectively

There is no detailed data on the size of the floor area of shops located within the modern sector However, these shops can be divided into two categories according to age The first are the old shops which were established during the Italian rule, which are generally of medium floor area, i e the average is 20-30 sq metres Most of the shops are found in the Istiqlal, Mizran, and Omar el Mukhtar Streets All these shops are individually owned, and the capital invested is high About 90 perccent of these shops are being rented by shopkeepers, the rent varying considerably from £L 14 to £L 65 per month A sample survey conducted by the writer on 130 shops in three streets (24 December, Istiqlal and Cairo) shows that the average rent is £L 23 14 0d per month

The new shops which were established from 1962 onwards have large floor areas, averaging 50-100 sq metres These shops were designed to have larger floor areas than the old ones, and occupy sites in the new multi-storey buildings which were erected recently in Istiqlal and 24 December Streets Therefore the rent is considerably higher and the average exceeds £L 30 per month, and the maximum reaching £L 100 per month As a result, the most expensive goods, such as refrigerators, radios, cameras, oriental gifts, modern women's fashion clothes etc , are to be found in these new shops

The distribution and location of these retail shops can be seen in (Figures 4 5 and 6)

1 Ready-made clothing shops are mostly concentrated in three major streets Omar el Mukhtar (14 shops), 24 December (9 shops) and Istiqlal (6 shops) Both Mizran and Cairo Streets have two shops each All these shops are well sited and have large show windows for women's modern fashions as well as men's suits and overcoats Most of the shops have high capital and follow commercially the modern European practices The owners of the shops are mostly Libyans who form 81 2 per cent, Jews constitute 18 8 per cent In general, more capital is invested in these shops than those in the Old Town The capital exceeds £L 100,000 but the average is not less than £L 20,000 per shop All of the displayed goods are foreign-made (Italian and British) and highly expensive Apart from ready-made clothes, the shops also sell the more expensive European textiles for both men and women As a result, almost the entire potential customers of these shops are either foreigners or Libyans of high income

2 The commercial function or specialization of electricity, radio, refrigerator and tape recorder shops is not well defined, as this kind of shop sells different consumer goods However, these shops are generally concentrated in the four main streets They have large show windows, and the displayed goods within the shops are mostly imported from the South and Western European countries, particularly Italy, Germany, France and the U K It is noteworthy that there is much capital invested in

Figure 4 5

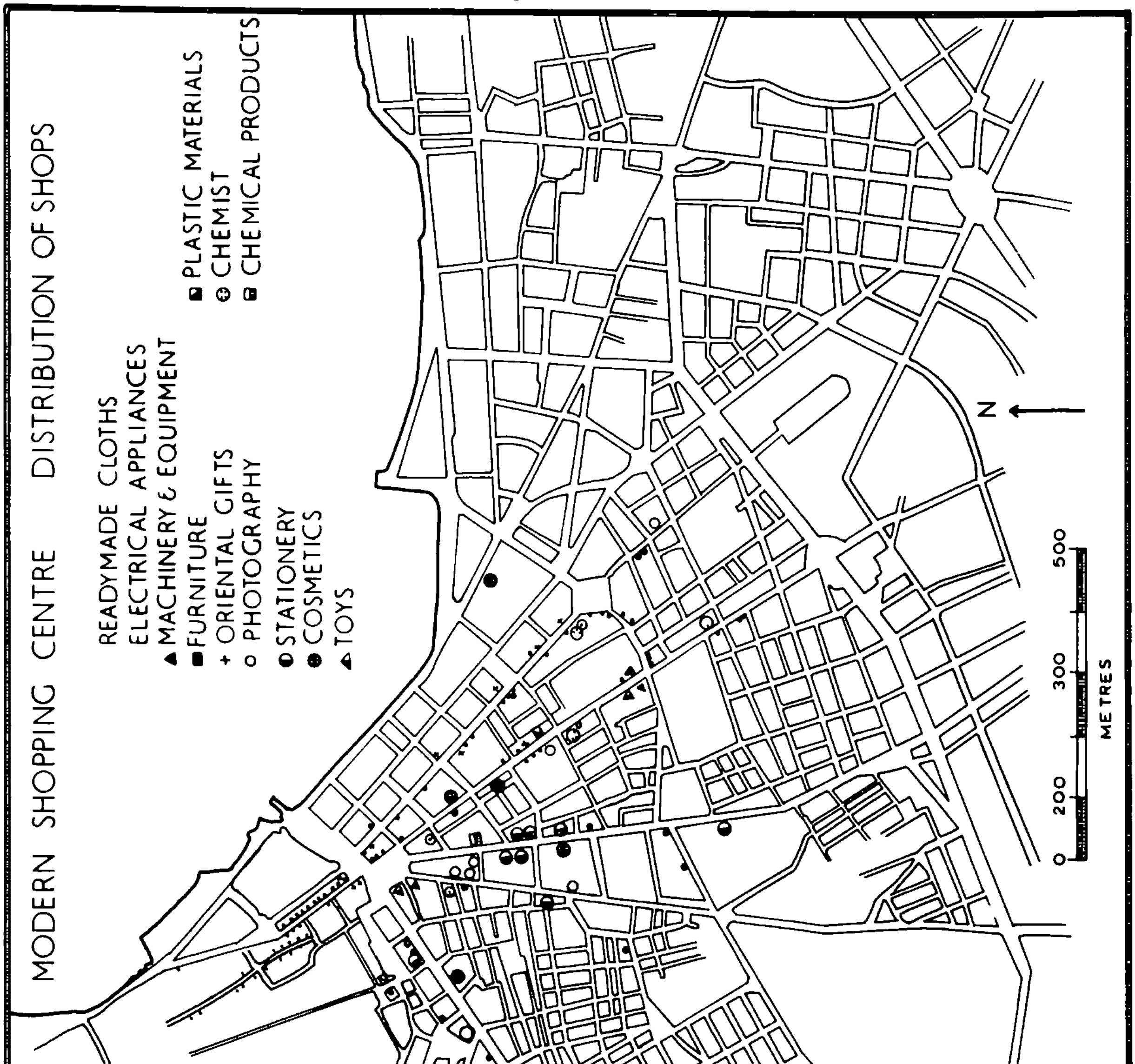
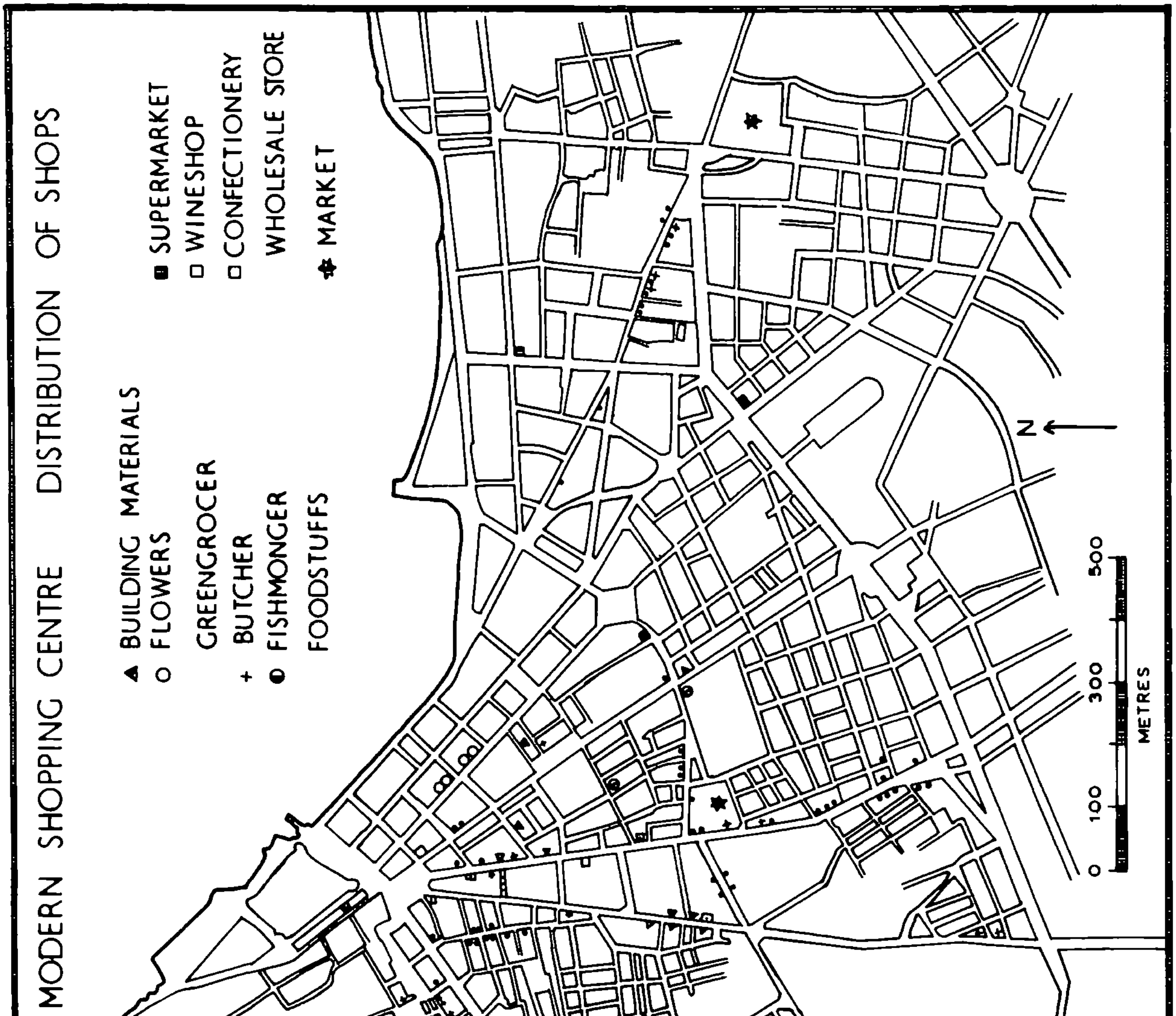

MODERN SHOPPING CENTRE
DISTRIBUTION OF SHOPS
READYMADE CLOTHS
ELECTRICAL APPLIANCES
MACHINERY & EQUIPMENT
FURNITURE
ORIENTAL GIFTS
PHOTOGRAPHY
STATIONERY
COSMETICS
TOYS
PLASTIC MATERIALS
CHEMIST
CHEMICAL PRODUCTS
OLD TOWN
N
0
200
300
500
METRES

Figure 4 6



MODERN SHOPPING CENTRE DISTRIBUTION OF SHOPS
BUILDING MATERIALS
FLOWERS
GREENGROCER
BUTCHER
FISHMONGER
FOODSTUFFS
SUPERMARKET
WINESHOP
CONFECTIONERY
WHOLESALE STORE
MARKET
OLD TOWN
N
0
100
300
500
METRES

these commercial establishments The majority of the owners are Libyans, representing 89 0 per cent, whereas Jews and Italians constitute 8 4 and 2 6 per cent respectively These electrical shops draw their potential customers from all parts of the city and Tripolitania as a whole It is interesting to note that there is a heavy demand for consumer goods of this type from Libyans, particularly from those who fall within high and middle income groups

3 Machinery and equipment shops deal generally with different kinds of goods, e g agricultural tools, motor vehicle spares, electrical power machinery etc They number 117 shops, 74 of which are located within the central business district, the rest being located in other streets The site location is not important for these shops because they have regular and specific customers, mostly industrialists, farmers and garage service men A high proportion of the shop-owners are Libyans who constitute 66 6 per cent, whilst the rest are Italians and Jews

4 Furniture shops are found in three major streets Maamun, 24 December and Haiti They number 71 shops, five of which are owned by Italians and eight are owned by Jews The rest are owned by Libyans The furniture shops have two economic functions selling and manufacturing In other words, the shop floor area is divided into two areas the selling area occupies the front, and the workshop is situated at the back In general the furniture shops fall into two categories modern and traditional shops The former are sited in the modern commer-

cial area Here the shops are modernized with large show windows, and they sell highly expensive furniture imported from Italy The traditional furniture shops are located within the transitional shopping area in Maamun Street between the Old Town and modern sector These shops are not modernized and are without show windows The owners of these shops are mostly Libyans, although some are Italians and Jews The customers of the furniture shops vary from one shopping area to another For example, the customers of the modern furniture shops are the high income groups, whereas the traditional furniture shops draw their customers from the lower income ones

5 Large shoe shops are primarily situated in two streets Omar el Mukhtar (6) and Istiqlal (3) Other shoe shops are scattered within the CBD Site selection of the shoe shops is important because most of the pedestrians use the main streets for their shopping All shoe shops have large show windows with extensive modernization The floor area of the shops varies from 50 sq metres to 150 sq metres The potential customers of these shops are of high income groups as shoe prices are high Small size shoe shops are sited within the transitional area and are open-fronted They draw a high proportion of Libyan customers because prices of shoes are lower than the modern sector shops Shoe shops in general do more selling during the winter months and religious occasions

6 Oriental gift shops number 66 About two-thirds of them are situated in the main streets of the modern sector,

Plate 4.5 Modern shopping centre in Omar el Mukhtar street

4. 6

Plate 4.6 Traditional shopping area for the wholesale of foodstuffs in El Rashid street

particularly Istiqlal, which comprises 21 shops 24 December Street has 12 shops Omar el Mukhtar has only 2 shops The rest of the oriental gift shops are located within other commercial streets of the CBD Libyan shop owners represent 72 7 per cent, the rest are Italians and Jews The existence of high numbers of oriental gift shops within the modern shopping area is due primarily to the tourists and foreign customers who are generally interested in the local Libyan handicrafts such as carpets, fancy goods, copper and silver works etc Therefore the site selection is of commercial importance to the shopkeepers who deal mostly with foreign customers

7 Photographic and camera shops are mostly located in the Amr Ibn El Ass Street, where there are six camera shops Both Istiqlal and 24 December Streets have three shops each Omar el Mukhtar has only two shops All these shops occupy good sites within the major thoroughfares which are used by most of the city pedestrians Six of the owners of the photographic and camera shops are Italians and there are four Libyans and four Jews

8 Stationery and book shops are located within the main commercial streets of the modern sector, particularly Mizran which has 11 shops Other streets such as Omar el Mukhtar and 24 December have 2 shops each Other stationery and book shops are scattered within the CBD Most of the shop-owners are Libyans who represent 75.0 per cent, the rest are Italians and Jews A high proportion of customers of these shops are

school-children and university students

9 Cosmetic shops lie in three main commercial streets, i e Istiqlal, 24 December and Omar el Mukhtar The former has six shops, the second has eight shops, whereas the third has only one ship Another 19 cosmetic shops are widely scattered within the central business district Most of these shops are owned by Libyans who represent 61 8 per cent, whereas Italians and Jews constitute 14 7 and 23 5 per cent respectively These cosmetic shops are highly modernized with show windows and extensive capital All cosmetic materials are imported from abroad, particularly France and Italy The shops draw their customers from all parts of the city but most of their potential customers are foreign and Libyan women from high income groups

10 Toy shops are highly concentrated within the commercial streets of the modern sector where there are 21 shops Other toy shops are located within the traditional shopping area of the Old Town 78 5 per cent of toy shops are owned by Libyans who have specialized in this trade since the Italian rule, the rest are Italians and Jews Most of the displayed goods are imported from Japan, other goods are imported from Italy and the U K The Japanese toys are cheaper than the European ones, and are more popular, particularly among the lower income groups The commercial activities of this trade increase during the religious occasions when parents are expected to buy toys for their children It is interesting to note that

toy shops attract more urban customers than rural ones The number of toy shops is increasing and owners try to select better sites in order to attract more customers

11 Shops selling plastic household utensils are concentrated in general in the Maamum and El Rashid In other words, their sites are associated with foodstuff shops and wholesale stores within the transitional shopping area Other shops are well distributed within the central business district and some Arab residential areas About 93 3 per cent of these shops are owned by Libyans, the remainder are owned by Italians Most of the displayed goods are imported from Japan The rest are from different European countries The demand for plastic utensils is growing within the city market, mainly because they are cheaper than china and other crockeries, they are unbreakable and last longer Consequently, plastic household utensils and crockeries are extremely popular, particularly among working class families Also they draw a high proportion of rural customers.

12 Chemical products shops are found throughout the Central Business District with a special concentration within the 24 December, Mizran, El Rashid and Omar el Mukhtar Streets Here the chemical material shops sell different kinds of chemical products which are either used in agriculture or industry Most of the displayed goods are imported from Germany, Italy and the U K The remainder are products of the new Libyan chemical manufacturing plants The majority of customers are

either industrialists or people who are engaged in agriculture within the rural areas of Tripolitania About 59 2 per cent of the shop-owners are Libyans, Italians and Jews constitute 40 8 per cent

13 The distribution of chemist shops is generally associated with the modern shopping centre There are, for instance, 14 chemists located within the commercial streets of the modern sector There are two chemists sited within the Old Town Another ten chemists are well distributed within the residential areas of Tripoli In other words, there is at least one chemist in every Arab residential area with the exception of the Shanty Town About 84 6 per cent of the total number of chemist shops are owned by Libyans, but they are run by foreign pharmacists, the rest are owned by Italians The various kinds of medical drugs are imported from abroad, particularly Switzerland, Italy, France, U S A and U K The existing number of chemist shops within the city is inadequate to cope with the heavy demand for medicine and drugs from the population of Tripoli Moreover, these chemist shops also provide services for rural people who come to Tripoli to buy medicines and drugs However, heavy demand for drugs does reflect the rising standard of living among urban and rural population alike

14 About one-third of the building material and sanitary-ware shops are located within the commercial streets of Tripoli, such as Omar el Mukhtar, El Rashid and 24 December Other remaining shops are widely distributed throughout the central business

district In other words, site selection is not restricted to specific areas since the marginal sites are more favourable This is primarily due to the existence of regular customers such as builders and contractors The majority of the owners of these shops are Libyans representing 72 2 per cent, whereas the Italians and Jews constitute 17 8 and 11 3 respectively All the sanitary ware and most building materials are imported from abroad, particularly Italy, France and the U K It is noteworthy that the number of building material and sanitary ware shops has increased in recent years due to expansion in public buildings and housing

15 The location of the nine flower shops is highly restricted to the main commercial streets such as Istiqlal and el Magarba Streets Their customers are drawn from the foreign community in Tripoli Five of the shop-owners are Libyans and the rest are Italians These shops depend entirely on the city's gardens which supply shops with their requirements of fresh flowers In general, the cost of flowers is rather high because gardening for market needs is largely confined to a few Italian gardens which specialize in this kind of business Sidi Mesri is the main supplying area for flowers Some European flowers were introduced to Libya by Italian gardeners

16 The foodstuff shops are numerous within the modern sector, primarily in two main streets El Rashid and Maamun Their site location is associated with the transitional shopping area between the Old Town and the modern sector The proximity

of two bus stations, the Municipal and the Regional, has enhanced the importance of the location of foodstuff shops Moreover, the heavy pedestrian and vehicular traffic which takes place within these streets, particularly in the morning and evening hours, makes these sites commercially attractive

The foodstuff shops draw a large number of urban and rural customers They deal with all different kinds of canned and dried foods About 90 per cent of the foodstuffs are imported from different European countries, particularly Italy, Holland, Spain and the U K The majority of the shop owners are Libyans, representing 83 3 per cent, Jews constitute 10 8 per cent and the Italians form only 5 9 per cent The meat, poultry and fish shops are mostly situated within the Municipality market There are 76 butchers and 16 fishmongers Other butchers and fishmongers are found within the Central Business District and the residential areas

17 Greengrocery shops are concentrated in the Municipality Market in El Rashid Street, where there are 45 such shops All kinds of fresh vegetables are available in these shops, but the prices of the vegetables are considerably higher than those in the traditional local markets Therefore the regular customers of these shops are of the high income groups who are mostly foreigners

There are also about 100 stallholders selling similar produce Their stalls are located within the transitional zone in open space in El Maamun Street Other stalls are found in open spaces within the residential areas of Mizran and Dahra Here the vegetables and fruits are cheaper, and so they draw a high proportion of Libyan customers from all parts of the city

18 Supermarkets were introduced recently to Tripoli, from 1953 onwards Three of these are located in different sites of the modern sector (Haiti, An Nasr and Ahmed el Sharif Streets) and another four are situated outside of the Central Business District within the upper class residential areas of Tripoli, such as Giorgimpopoli and Gargaresh The existing supermarkets of the modern sector of the city are highly organized and a considerable amount of capital is invested The floor area of each supermarket varies considerably, but the average is between 250-500 sq metres They have large show windows for displaying goods The supermarkets sell various European foodstuffs, whether they are canned or uncanned, vegetables, fruits, frozen chickens, as well as other household requirements such as toilet soap, laundry soap, etc They are similar to American and British supermarkets and are owned by Libyans but mostly managed by foreign staff These supermarkets provide excellent shopping services for the higher income groups, particularly for foreign communities and wealthy Libyans The existence of these supermarkets is associated principally with the upper class residential areas of the modern sector

19 Wine shops are more flexible in their distribution because they do not seek the best sites within the main commercial

streets, due to high rents Eight wine shops are found in Omar el Mukhtar Street representing the highest concentration Other streets such as Mizran, 24 December and Haiti have two each The rest of the wine shops are widely distributed throughout the whole modern sector, with more concentration within the Italian residential areas Most of the wine and alcoholic drinks displayed are imported from European countries (Italy, France, Germany and the U K) Libyan wine products represent the rest Two-thirds of the wine shop-keepers are Italians and the remainder are Jews No Libyans are allowed to sell alcoholic beverages

20 Most of the confectionery shops are associated with the shopping area of the modern sector Their sites are generally located within the major thoroughfares of the city where the pedestrian traffic takes place Other shops are scattered throughout the Central Business District Three-quarters of the confectionery shops are owned by Libyans whereas the Italian and Jewish shop-owners constitute 17 5 and 7 5 per cent respectively The Libyan confectionery shops are generally traditional and Syrian, producing different kinds of oriental cakes and pastries They draw a high proportion of Libyan pedestrians as well as other regular customers The Italian and Jewish confectionery shops produce only European cakes and pastries, drawing their customers from foreign communities and Libyans of high income This is primarily due to high prices of European cakes compared with Libyan ones Apart from the

cakes and pastries, the Italian and Jewish confectionery shops produce and sell all kinds of ice creams and fruit juices and soft drinks Most of these premises are equipped with seats and tables to function as coffee bars

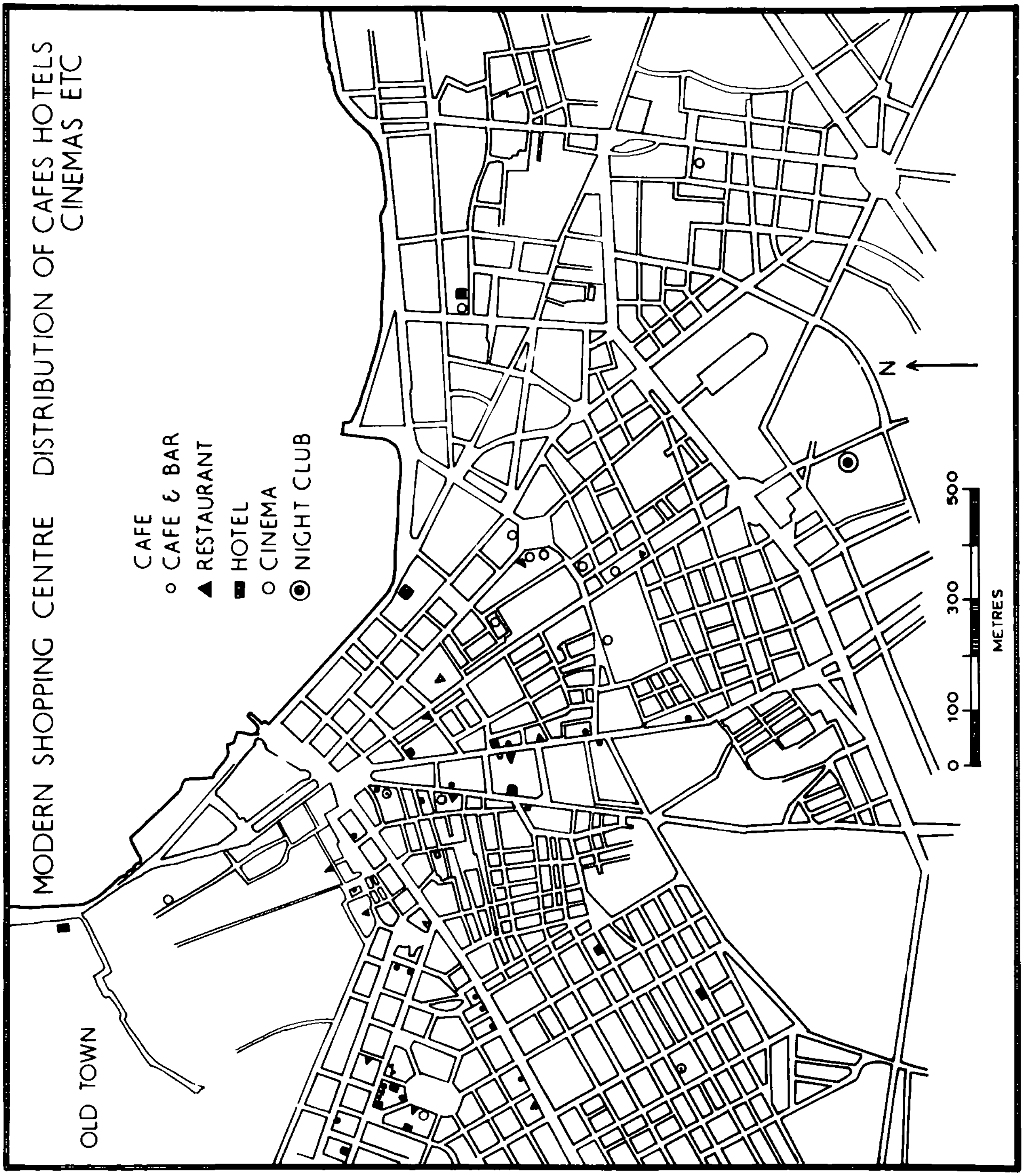
21 Cafes, public houses, restaurants, hotels and places of entertainment such as cinemas and night clubs are generally found within the modern shopping area of the city (Fig 4 7) This is related to the fact that most commercial and business activities take place within this area Therefore these commercial premises attract more pedestrians, particularly during the morning and evening hours Table 4 5 shows that the above commercial activities are nearly equally run by Italians and Libyans, indicating the economic role of Italians within the modern sector.

Table 4 5 Ownership of cafes, cafes and bars, etc , 1967

Kind of business	Libyan Arabs	Italians	Jews	Total
Cafes	14	-	-	14
Cafes and bars	-	32	-	32
Restaurants	10	12	-	22
Hotels	22	2	-	24
Cinemas	4	10	-	14
Night clubs	4	-	-	4
Total	54	56	-	110

Source Field Work Survey (1966-1967)

Figure 4 7


MODERN SHOPPING CENTRE   DISTRIBUTION OF CAFES HOTELS CINEMAS ETC
CAFE
CAFE & BAR
RESTAURANT
HOTEL
CINEMA
NIGHT CLUB
OLD TOWN
N
0
100
300
500
METRES

The first-class Italian cafes and bars are widely distributed within the modern sector with a special concentration in three main commercial streets (Istiqlal 4, Omar el Mukhtar 4, Haiti and 24 December each have three, Algeria Square 2) These cafes and bars occupy excellent sites and are well organized by the Italian management They attract mainly foreigners and Libyans of high income groups Apart from the light refreshments and soft drinks, they sell various kinds of alcoholic drinks such as spirits, wines and bottled beer All these cafes and bars are owned by Italians, but the waiters are generally Libyans

Second-class Arab cafes are sited within the transitional zone, Maamun and El Rashid Streets and other commercial streets They have less capital invested in the cafes, and sell all kinds of soft drinks, tea, coffee and snacks Most of these cafes attract more rural shoppers and working class people

22 Restaurants are mostly located within the Central Business District where all commercial activities take place First-class restaurants are more confined to the modern shopping area Here the restaurants serve Italian dishes as well as English ones Most of these restaurants draw their customers from high income groups Other first-class restaurants are sited within the upper class residential areas of Gargaresh and Giorgimpopoli where the American, British, French and other foreigners live Here the restaurants provide all different kinds of European meals, particularly French and

American Second-class restaurants are situated within the transitional zone and shopping area of the Old Town The regular customers of these restaurants are mostly Arab shop-owners, workers and rural people who come to Tripoli for shopping Therefore the restaurants have more customers during the lunch hours (1-4 p m), but less customers during the evening hours (7-10 p m)

23 Hotels are also an important factor in the economy of the city Apart from the fact that the hotels offer accommodation and meals for tourists and foreign visitors, they also cater for social functions such as engagements, marriage ceremonies etc for Libyans In addition, official entertainment for foreign dignitaries, statesmen, festivities and national occasions, take place in the first class hotels, i e Libya Palace, Mediterranean and Waddan Thus the city hotels have two functions economic and social Both of them affect the shopping area, particularly the wholesale stores of foodstuffs, wines, soft drinks, etc Other shops are also affected, particularly those that deal with oriental gifts and fancy goods

Table 4 6 Distribution of Hotels, 1967

Hotel	Grade	Location	No of rooms	No of beds
Libya Palace	De luxe	Shara Sidi Isa	234	500
Mediterranean	De luxe	Shara Omar el Mukhtar	320	500
Waddan	De luxe	Shara Sidi Isa	92	184
Grand Hotel	1st G	Shara Adrian Pelt	73	114
National	1st G	Maidan San Francesco	68	100
Capitol	1st G	Maidan 9 August	60	104
Atlantic	1st G	Shara Sidi Darghout	42	60
Lux	1st G	Shara Omar Ibmel As	32	60
Mehari	Tourist	Shara el Shatt	226	226
Continental	Tourist	Shara Sidi Bahlul	54	84
Rex	2nd G	Shara Omar el Mukhtar	47	80
El Cornice	2nd G	Shara el Malik Saud	34	50
Excelsior	2nd G	Shara Gharnata	27	47
Oriental	2nd G	Shara el Gazali	46	92
Astoria	2nd G	Shara Ibn Sina	28	52
Ferdous	2nd G	Shara el Rashid	55	80
Libya	2nd G	Shara el Bahren	25	45
Jebil el Akhdar	2nd G	Shara el Mamun	43	120
El Inaya	2nd G	Maida 9 August	24	83
Arriyad	3rd G	Shara el Kumeth	8	25
Barqa	3rd G	Shara el Kumeth	9	28
Markasi	3rd G	Shara Zuara	18	29
Total			1,565	2,664

Source Ministry of Economy and Trade, Department of Tourism Tripoli, 1967

Most of the first-class hotels, including the de luxe are situated in the northern part of the Central Business District, near the sea coast and within the modern shopping area In other words, their distribution is associated with the recreational area of the beach, and the commercial activities of the modern sector Just over one-third of the total are first class hotels Two of these are owned by the Municipality of Tripoli, but they are rented by Libyan businessmen In general the hotels were built and designed with oriental architecture by the ex-Italian administration Other first-class hotels are entirely owned by Libyans, but almost all are run by Italians or Greeks

There are only two tourist hotels, the "Mehari" is situated in Shara Adrian Pelt near the sea coast, and is owned by the Municipality of Tripoli and rented by a Libyan businessman, while the second is sited in Sidi Bahlul Street within the modern sector.

The nine second-class hotels are generally located within the transitional zone and modern shopping area In other words, their locations are associated primarily with the commercial activities of the modern sector and the transitional area Three of these hotels are owned and run by Italians, the rest are owned by Libyans, but the administration is generally run by Italians or Greeks

There are only three third-class hotels, representing 13 6 per cent of the total Two of these are sited within the transitional zone in Kumeth Street, the third is located in Mizram Street All these hotels are owned and run by Libyans Their customers are generally rural people and non-Europeans

Although the number of hotels has increased in Tripoli from seven in 1956 to twenty-two in 1968 (containing 1,565 rooms with 2,663 beds), there still exists a shortage of accommodation especially in first class hotels This is primarily due, partly to the permanent booking by the oil companies, senior Government officials, foreign visitors, and Libyan businessmen, and partly to the inadequate number of hotels to cope with the flow of tourists and other visitors This situation becomes acute during the period of Tripoli International Fair between 28th February-20th March of every year During this period there is a great deal of demand on accommodation, not only from foreign tourists but also from Libyan visitors from outside Tripoli and Tripolitania

24 There are 14 cinemas in Tripoli of which 12 are located within the modern shopping area, with a special concentration in two streets Amr Ibn El Ass and 24 December This site selection of the cinemas is primarily associated with the shopping centre and other business offices Here the site is of a commercial importance because the cinemas can attract more customers and draw the attention of pedestrians Another two cinemas are sited within the residential areas of the Shara el Garbi and Dahra quarters

Films shown are mostly Italian and American Egyptian films are only shown in three Arab cinemas El Hambra, Royal and El Rashid This is mainly due to the fact that the majority of the cinema houses are owned and run by Italians, another two are owned by Jews, and only three cinemas are owned by Libyans

There are only four night clubs They are located outside of the CBD This is related to the fact that the location of the night clubs within the commercial and residential areas is not desirable for social reasons Therefore the managers favour the sites of their night clubs away from the CBD and the residential areas Almost all the night clubs are owned by Libyans, with Italian management The majority of customers are foreigners and Libyans with high incomes

2 Wholesale Trade

The majority of the wholesale stores are located in five streets, namely El Rashid, Maamun, Shakshuki, Nabiga and Kuwait The rest of the wholesale stores are sited throughout the whole Central Business District The location of the former wholesale stores is more important because they are associated with the transitional shopping area between the Old Town and the modern sector, near the Tripoli port, to which easy access is of considerable importance The proximity of these stores to the retailing shops is also of a commercial value to the retailers who can get their requirements of goods from these stores Finally, parking facilities are available near the wholesale stores, enabling the loading and unloading of goods

The majority of the 132 wholesale merchants are Libyans who represent 81 8 per cent, the remainder are Jews who constitute 18 2 per cent The wholesale stores in general deal with foodstuffs such as sugar, flour, rice, tea, canned food, and other household requirements The wholesale merchants import such foodstuffs from abroad (e g from Italy, Germany, Holland, France, U K etc (Appendix I, Table 1), the value amounting to £L 19,651 million or 13 58 per cent of all imports in 1966 The total imports to Libya were £L 144,662 millions in 1966 (Appendix I Table 2) (4) It is estimated that about two-thirds of the imported goods, whether foodstuff materials or other commodities, were sold in Tripolitania The wholesale merchants are almost entirely concentrated in Tripoli, and deal with their clients in the city and other towns in Tripolitania Moreover, the impact of the wholesale trade affects also Fezzan retailers who come to Tripoli to deal with the wholesale stores Therefore the sphere of influence of the wholesale trade covers generally the whole of Tripolitania and Fezzan

The Municipal Public Market is another wholesale marketing centre operating since 1965 This market is situated in Gurgi area to the east of the Wadi Mejenin and it occupies an area of 20 hectares The wholesale function of the market is trading with vegetables, fruits, cereals and livestock, etc

Table 4 7 The Wholesale Market of the Suk el Tulatah, Tripoli, 1968

Category	No of wholesale stores
Green vegetables	122
Cereals	46
Other foodstuffs	40
Mats	28
Charcoal	4
Total	240

Source Field Work Study (1967)

Agricultural products come to the market from the whole area of Tripolitania where the farmers sell their products in bulk to the market merchants Then the market draws its retailing customers from the whole city The commercial activities of the market take place daily, but are more intense on Sundays and Tuesdays Live animals such as sheep, goats, camels and cows are also displayed for sale on every Sunday and Tuesday Here the butchers and other customers can purchase live animals either for slaughtering or stocking (Plate 4 7)

It can be seen that the shopping centre of Tripoli is growing in terms of floor area, number and kinds of shops This is primarily related to the flow of foreign capital to Tripoli, investment of Libyans to their capital in trade, demand for goods particularly luxury goods by Libyans and foreign communities living in the city Although the modern shopping centre is larger and has been expanding throughout

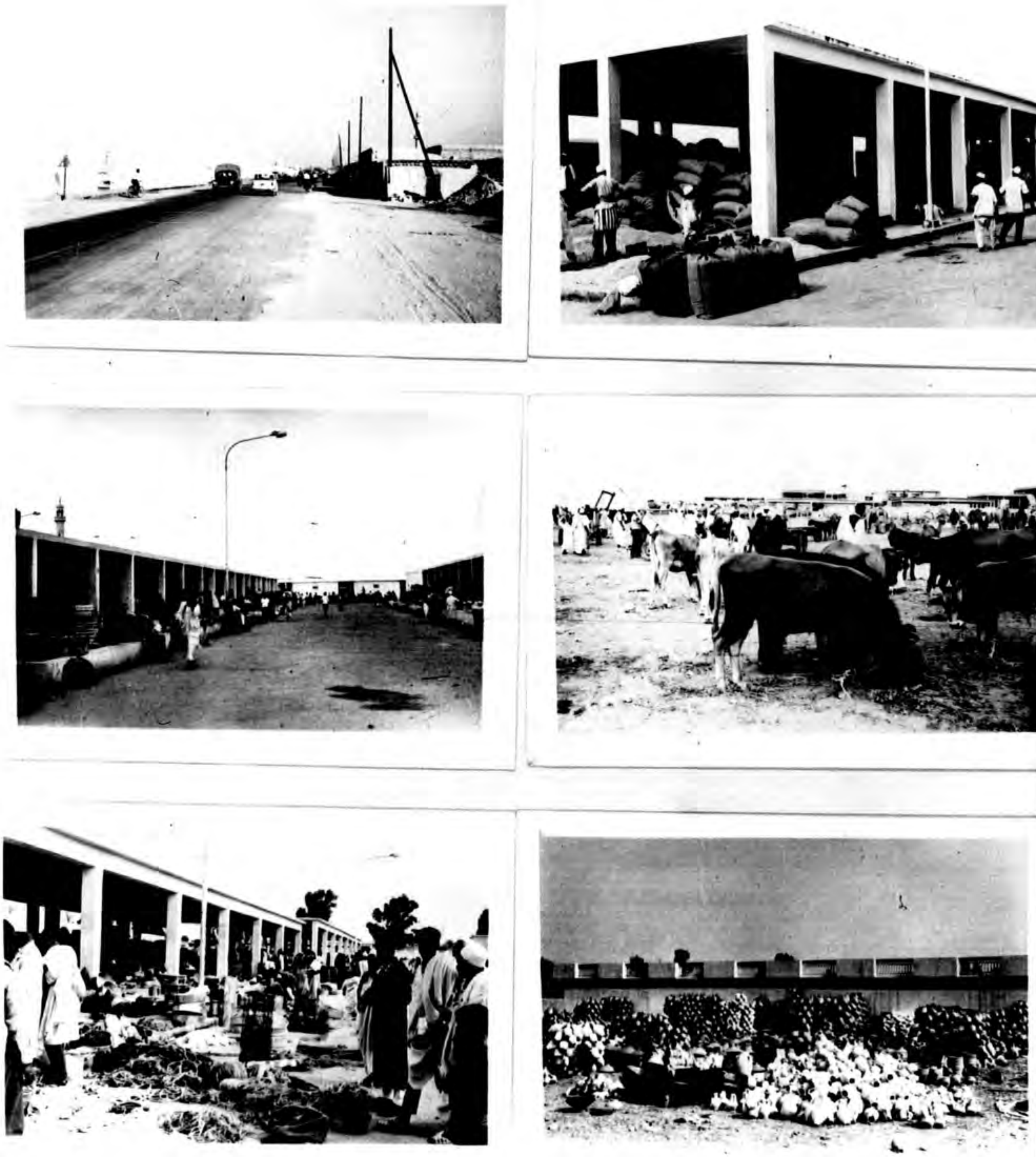


Plate 4.7 Suk el Tulatah (Municipal Tuesday Market).
Note the various wholesale activities.

the central business district, the traditional centre is also expanding within the Old Town at the expense of the residential areas

4 3 THE INDUSTRIAL FUNCTION

Industrial development in Tripoli began as early as 1922 and grew considerably from 1956 onwards Several factors stimulated industry in Tripoli The most important of these is the existence of agricultural raw materials The Jefara plain and the Tripolitanian Jebel provide a substantial supply of agricultural products such as wheat, barley, olives, grapes, tobacco, dates and tomatoes, and the Ghibla region in the southern part of Tripolitania supplies the traditional workshops of the Old Town with the necessary wool The use of local hides and skins is also important in stimulating industry

The mineral resources such as sandstone, limestone and clay provide the fundamental basis for the manufacturing of limestone blocks, bricks and tiles The use of gypsum in the housing industry is also important

Other raw materials required for Tripoli industries are imported These include cotton, silk and other yarns, leather, paper, metals and a great variety of miscellaneous materials required for light manufacturing industries

There is no lack of water since the underground water resources of the Metropolitan area are ample to provide the necessary requirements of all Tripoli industries Some of the large plants installed their own water supply by sinking wells However, the salinity and the high calcium content of Tripoli water presents a problem for some industries For example, the brewery and food processing industries have to boil and purify water

Electrical power meets adequately the needs of the city's industry The Tripoli Electricity Corporation charges 15 millimes (1/6d) per kilowatt/hour This low rate is aimed to reduce the cost of industrial production

The installed capacity of electricity generator plant of Tripoli Electricity Corporation has increased from 10,600 kilowatts in 1954 to 542,960 kilowatts in 1966, while production has increased from 40,405,226 kilowatt hours in 1954 to 182,371,078 kilowatt hours in 1966 (Appendix I Table 3)

The sales of electricity for industrial and lighting purposes have increased considerably from £L 415,482 in 1954 to £L 1,532,126 in 1966 (Appendix I Table 3)

Libyan industrial capital has grown owing to oil discoveries and production A considerable number of Libyan businessmen began to invest in industry instead of in real estate property The investors found industry more profitable than the estate property Foreign capital has also contributed enormously to the industrial development of the city There are, for instance, several Italian, Greek and Norwegian plants operating in Tripoli American, British and Dutch firms have solely invested their capital in the oil industry

The Libyan industrial investment in a single plant varies considerably The minimum capital investment is not less than £L 5,000 for a small plant, whereas the highest capital investment recorded exceeded £L 400,000 for the largest firm

Table 4 8 Distribution of capital invested in Tripoli Plants (December 1967)

Fixed capital invested in £L	No of Plants	Percentage
5,000 - 50,000	15	50
51,000 - 100,000	6	20 0
101,000 - 150,000	3	10 0
151,000 - 200,000	2	6 8
201,000 - 250,000	1	3 3
251,000 - 300,000	1	3 3
301,000 - 350,000	-	-
351,000 - 400,000	1	3 3
Over 400,000	1	3 3
Total	30	100 0

Source Field Work Survey based on 30 samples on different industrial plants, Tripoli, 1968

The above table shows that the majority of Tripoli's industrial establishments are small, representing 70 per cent of the total These plants have a capital ranging from £L 5,000 to £L 100,000 Medium sized industrial establishments which have capital ranging from £L 101,000 to £L 200,000 represent 16 8 per cent, where as the large plants whose capital exceeds £L 200,000 constitute

13 2 per cent

The number of Libyan owners and managers is 82, representing 70 0 per cent, Italians (20) and Jews (3) constitute 17 3 and 2 5 per cent respectively Another 12 industrial plants are owned by different nationalities, forming 10 2 per cent

A sample survey conducted by the writer of 78 industrial firms in Tripoli reveals that half of the total are privately owned, one-quarter are Joint Stock companies, and one-quarter are financed by foreign investment

Manpower requirements are also an important factor in stimulating industrial development in Tripoli The number of workers has increased from 1,527 in 1954 to 9,049 in 1967 This figure includes also the traditional industries This rapid growth in the number of workers is primarily due to the drift of rural people to the city and the return of Libyans from Tunisia, attracted by the wealth associated with the establishment of the oil industry The majority of Libyan workers are semi-skilled, representing 80.3 per cent, whereas the skilled workers constitute 19 7 per cent

Some of Tripoli's products can compete successfully with the imported ones As a result, the marketing of such products does not create any serious problem for the firms operating in the city This is particularly so in the case of building materials and some food and processing industries Indeed, some of Tripoli's industries operate over their optimum production capacity because of the heavy demand on their products However, new plants such as chemical and sweet industries, suffer adversely from imported European products

All products are transported by lorries or trucks The distance of the industrial sites from the city centre does not exceed 7 kilometres, but the transportation of goods to other towns in Tripolitania is of considerable significance to the firms This is due to the fact that the firm is responsible for transporting goods such as foodstuffs, soft drinks and beers etc to the main wholesale dealers in Tripolitania and other Libyan towns in Cyrenaica and Fezzan The cost of transportation is generally high owing to the long distances between the firm's site and other market centres

The official policy of the Libyan government has been to encourage industrialization in order to reduce imports from abroad and create employment for the growing number of people seeking jobs in the city This policy is implemented in various ways Firstly, the Government does not charge any import tax for a period of 5 years on imported raw materials required for manufacturing or equipment for new factories Secondly, the Industrial and Real Estate Bank offers short and long term credits to Libyan industrialists Thirdly, the Ministry of Industry gives a great deal of technical and scientific assistance to the industrial establishments in order to enable them to produce better quality goods Fourthly, the Ministry gives industrial protection against foreign products Libyan production is of a high quality and can compete with imported products

All these factors have stimulated industries and gave rise to the emergence of various kinds of industries within the city as well as within other Libyan towns

The total number of industrial establishments in Libya with capital of over £L 5,000 is 197, 117 of which (60 6 per cent) are in Tripoli, 38 (19 7 per cent) in other Tripolitanian towns and 38 in Cyrenaica Therefore the whole of the Tripolitanian region has 80 3 per cent of the overall number of industrial firms in Libya The evolution of these industries began in 1922 (Table 4 9) By the end of the Italian rule there were nine factories During the British Administration (1943-1951), two more factories were established Since Independence (1951 onwards), 106 factories have been established (see Table 9) It is clear from the table that the rapid increase in the number of industrial firms took place in 1960s due to the availability of capital and impact of oil production As a result, the total built-up area has increased from 88.0 sq metres in 1922 to 183 hectares (1,830,000 sq metres) by December, 1967 (Fig 4 8)

Figure 4 8

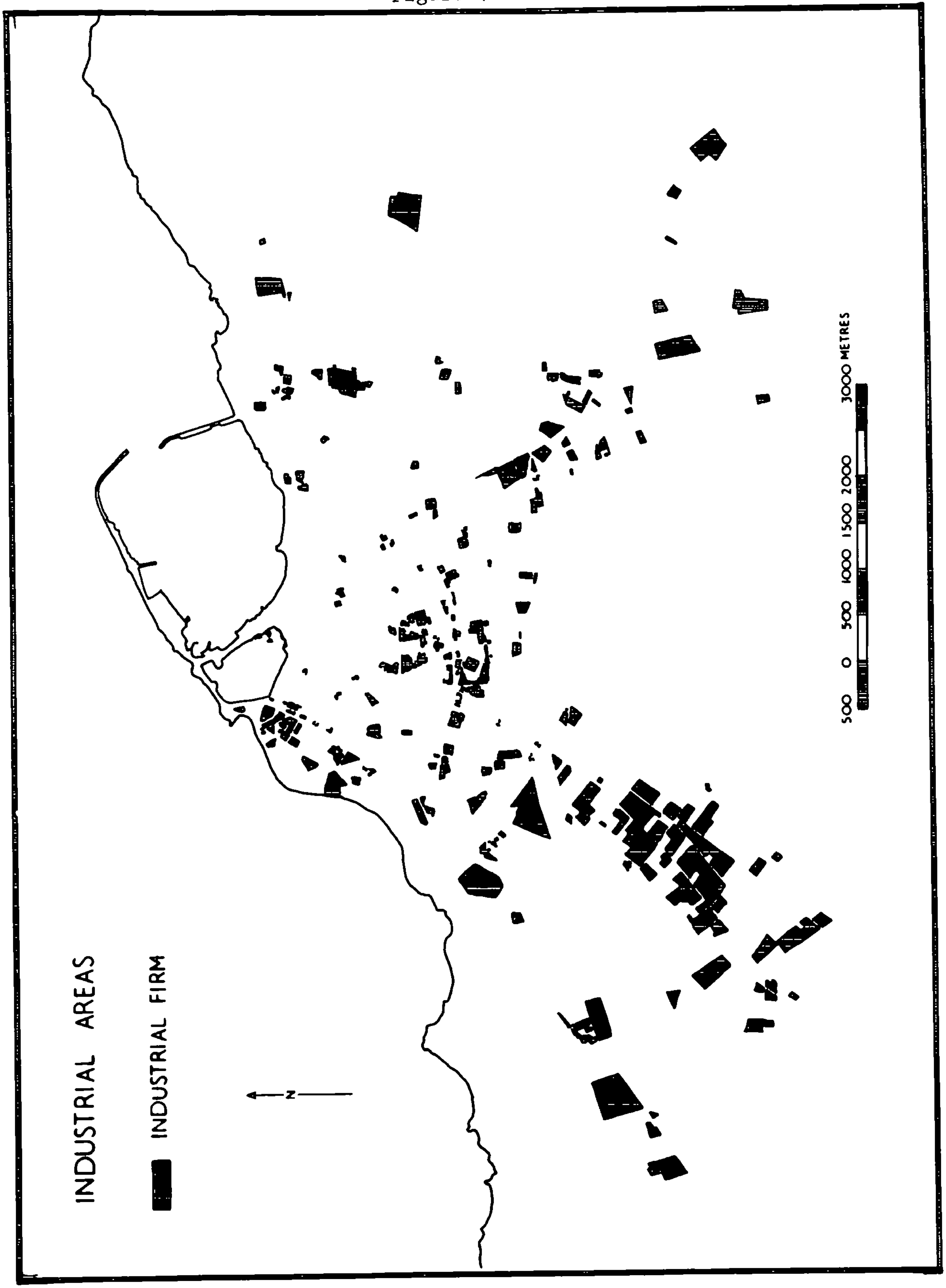

INDUSTRIAL AREAS
INDUSTRIAL FIRM
N
500 0 500 1000 1500 2000 3000 METRES

Table 4 9 Industrial firms established in Tripoli between 1922-1967

Year	No of industrial firms
1920-29	3
1930-39	4
1940-49	4
1950-59	21
1960-67	85
Total	117

Source Field Work Survey (October, 1967)

Industrial establishments

The industrial firms of Tripoli comprise various kinds of manufacturing activities such as processing, food and agricultural products, textiles, chemicals, bricks, etc (Fig 4 9)

Figure 4 9

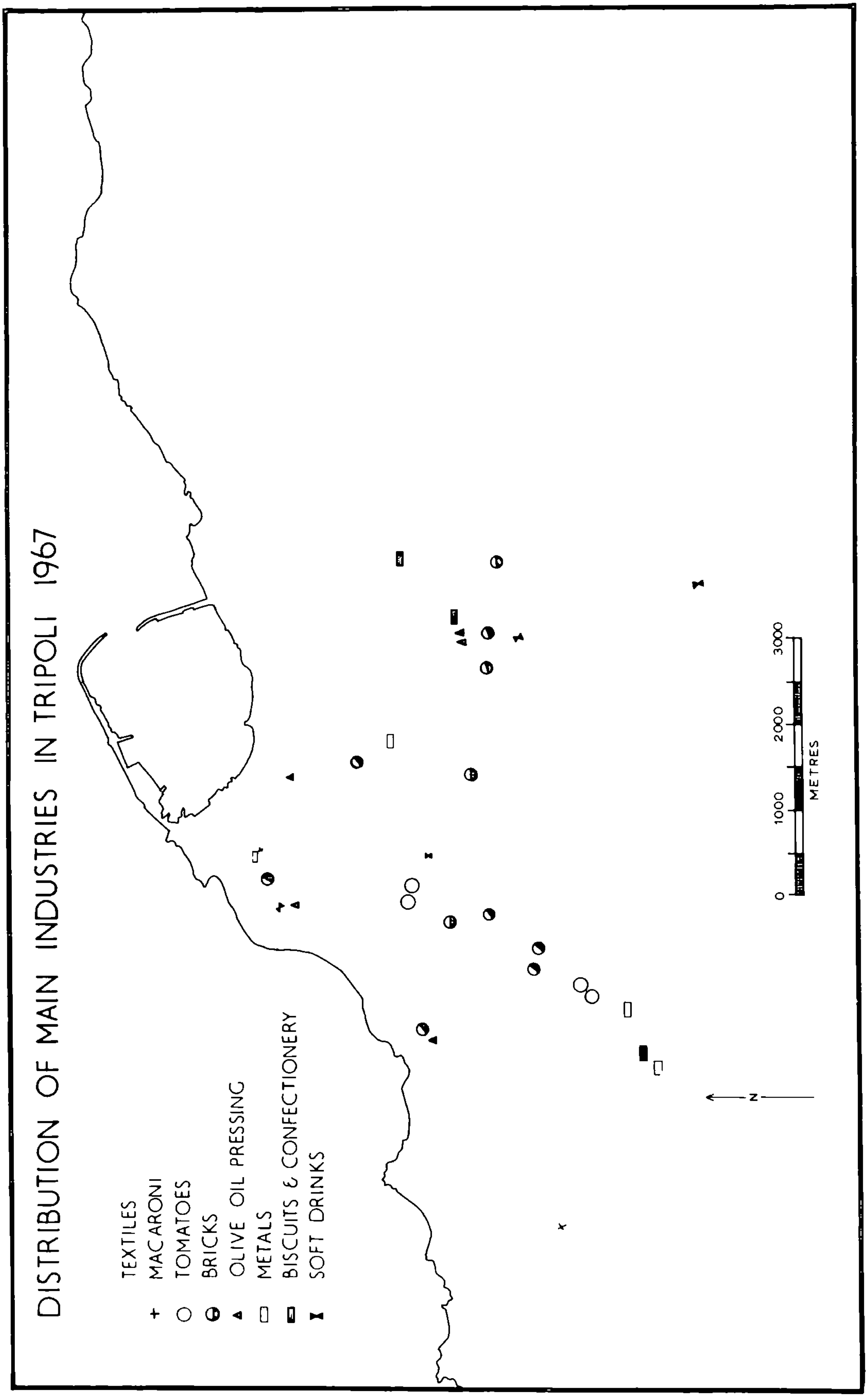

DISTRIBUTION OF MAIN INDUSTRIES IN TRIPOLI 1967
TEXTILES
MACARONI
TOMATOES
BRICKS
OLIVE OIL PRESSING
METALS
BISCUITS & CONFECTIONERY
SOFT DRINKS
N
0
1000
2000
3000
METRES

Table 4 10 Industrial Establishments, Tripoli, 1967

	Category	No
1	Milling factories	2
2	Bakery "	2
3	Macaroni "	12
4	Tomato "	4
5	Sardinella and Tuna	1
6	Biscuits and confectionery	7
7	Olive pressing	9
8	Coffee	2
9	Soft drinks	3
10	Alcoholic beverages and wine	5
11	Textile and wearing apparel	15
12	Brick and other building materials	16
13	Paint	2
14	Paper	1
15	Tannery	1
16	Tobacco	1
17	Metal	10
18	Wood	4
19	Battery	2
20	Gas	2
21	Plastic	4
22	Soap	2
23	Others	10
		117

Source Field Work Survey (October, 1967)

Table 4 10 illustrates that food and processing industries represent about 40 2 per cent of the total Textiles and brick industries have nearly equal percentages (12 8 and 13 6 per cent respectively), while metal and miscellaneous industries have equal percentages

1 Food processing and canning industries

These constitute 37 per cent of Tripoli's industries Macaroni, spaghetti and related products are the most important food processing industry They number 12 factories, 9 of which are situated within the CBD The rest lie within the industrial zone (Plate 4 8) Ten of these factories are owned by Libyans, the rest are Italian owned

The production of macaroni and spaghetti paste has increased from 1,999 tons in 1954 (sales amounted to £L 132,759 to 24,611 tons in 1966 (sales amounted to £L 1,382,665 Appendix I Table 4) This rapid increase in production and sales is due primarily to the heavy demand for macaroni and spaghetti pastes in local markets in Tripolitania, Fezzan and Cyrenaica, these products are not exported This is partly due to limited production and partly to the absence of demand on the part of other neighbouring countries which lack this kind of industry

The number of persons engaged in the macaroni industry has risen from 77 workers in 1954 to 206 in 1966

2 Milling of cereals

There are two milling factories in Tripoli The first is situated in Sidi Mesri area to the south of Tripoli and was established in 1940 by an Italian firm The second is located in the Gurgi area to the west of Tripoli The two factories occupy an area of 59 7 hectares

Both factories depend in their production on Libyan and foreign cereals They produce different kinds of milling products such as flour, semolina, kuskusi (hard semolina) and brans The flour produced is of high quality, but it does not compete successfully with foreign flour, particularly German and Russian The Libyan market cannot rely on the local production of the two factories as it fluctuates from one year to another depending entirely on the agricultural harvest of cereals within Tripolitania (Appendix I Table 5) Production from these two factories cannot satisfy the Libyan market which consumes large quantities of flour, semolina and kuskusi The number of employees within the two factories is 86, and their employment is seasonal

3 Bakery factories

There are only two large bakeries in Tripoli, located within the CBD They produce various kinds of good quality breads which are superior to those produced by smaller bakeries This is related to the use of modern methods on the part of these large bakeries which produce large quantities of bread to satisfy market demands as well as the Government hospitals, Libyan army and other institutions

In addition, there are numerous small bakeries operating within the city They cater for the daily needs of the inhabitants of the residential areas

4 Biscuit and sweet factories

These number seven, employing 264 workers They are in different sites within the old and new industrial areas of Tripoli Five of these factories specialize in the production of sweets, catering for the requirements of the lower income groups who favour cheaper local sweets Better quality sweets are imported from Italy However, the production of these factories has started in 1964 (Appendix I Table 6)

There are two biscuit factories situated outside the CBD The former is located at Sidi Khalifa Street and the latter lies in the new industrial zone of the Suani Road (Plate 4 9) The latter factory is bigger than the former and occupies an area of 10,000 sq metres The average annual production is estimated at 10,000 tons of biscuits

Most of the biscuits produced are sold either in Tripoli or other urban centres of Tripolitania Although the quality of the biscuits is high, it does not totally satisfy the demands of the Libyan market which consumes high quantities of biscuits, particularly the young population It is estimated that the production satisfies only one-quarter of the Libyan market's needs This is partly due to the foreign competition of the imported biscuit which costs less than the local brand, and partly to the limited capacity of the Tripoli biscuit factories This limited production capacity cannot cope with the increasing Libyan demand for biscuits

Plate 4.8 Macaroni and Milling factories in Gurgi's industrial area

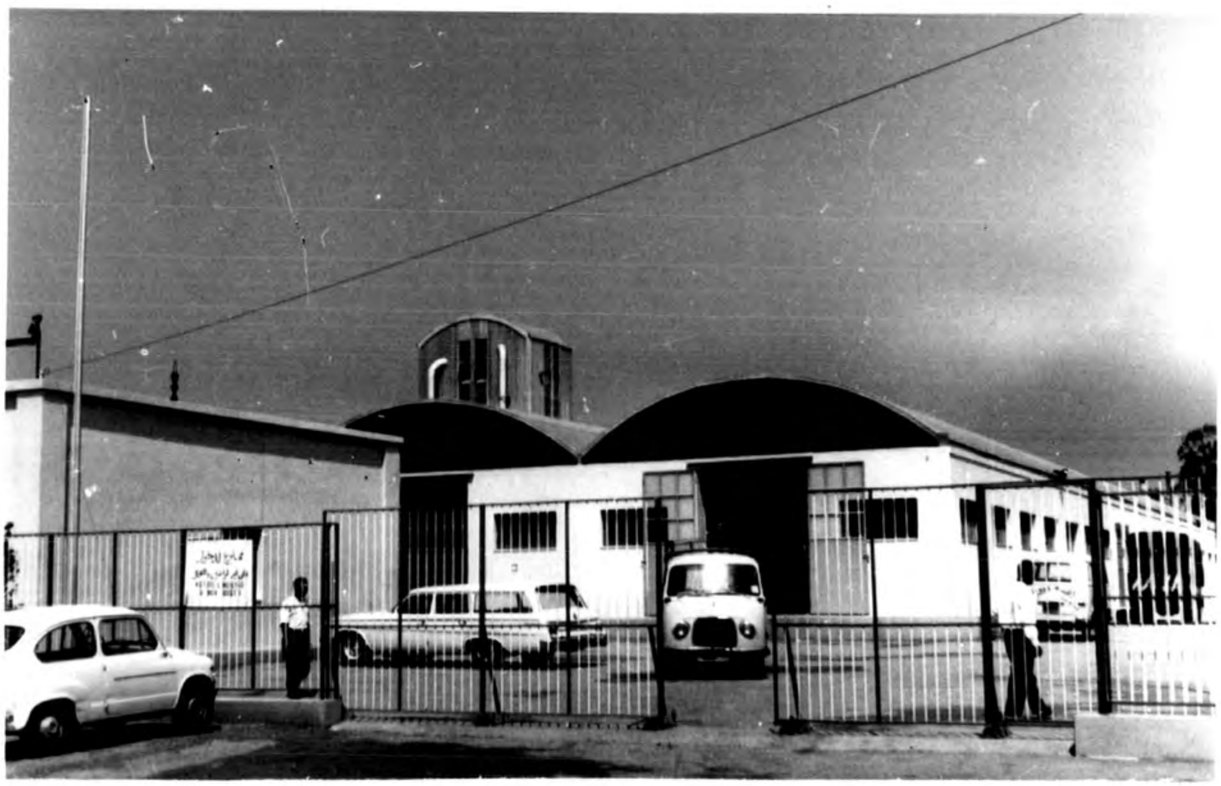


Plate 4.9 Biscuit and Sweet factories in Suani Road industrial area

Generally speaking, both sweet and biscuit industries are in the early stages of development Therefore it cannot be expected that these industries can satisfy the total Libyan market for at least a few years

5 Tomato paste factories

There are two tomato paste factories situated at two different sites The former is located at the Mohammed Ali Essanussi Street and the latter within the new industrial zone Production began in 1954 when the first factory produced 80 tons of tomato paste It increased considerably after the second factory started production The production of both factories continued to rise in the following years to reach 10,176 tons in 1965 However, it fell down to 7,815 in 1966 (Appendix I Table 7) The rising production between 1956 and 1965 was primarily due to the increasing local demand The decline in production in 1966 is attributed to increased foreign competition especially from Tunisian and Italian tomato pastes which are superior in quality to the Libyan product

The production of tomato paste is seasonal and takes place only during the summer months between July-September This arises from the fact that the climatic conditions of the coastal zone and the Jefara plain of Tripolitania govern the growth of tomato plants The tomato harvest takes place only in the summer when the land cultivated with tomatoes gives mass production Often the high yields of tomatoes create difficulties to both farmers and the operating factories For example, there are delays in unloading which could amount to two days This is attributed to two factors the lack of efficiency and good management in the factories, and also the very limited capacity of these factories, a factor which gives rise to the spoiling of the ripe tomatoes Therefore, the Ministry of Industry has allowed another four tomato paste factor to be established outside Tripoli in order to ease the high pressure on the city factories

The employees of the tomato paste factories numbered 404 in 1966, whereas their number was only 20 workers in 1954

6 Fish canning

The canning industry began in Tripoli in 1944 by a Jewish businessman who established the first factory in the city The factory is situated near the Jewish cemetery to the north of the city, occupying an area of 2,200 sq metres

The production of fish canning is seasonal, starting at the beginning of July and ceasing in October when the fishing season ends The factory produces two kinds of fish, namely sardinella and tunny, which are caught along the coast of Tripoli within 10-12 kilometres offshore The fish are brought by boats to the factory for canning in olive oil or preserving in salt

Unfortunately no independent data is available for the Tripoli factory the only data includes the other factories of Janzur, Zuara, Sabratha, Zliten and Misurata The production of these factories fluctuated between 1951-1963 (Appendix I Tables 8 and 9), due to the amount of fish caught from the sea

The demand for canned sardinella and tunny is high in the Libyan market, and school children in particular consume large quantities of canned fish Consequently, the production of all the fish canning factories of Tripolitania does not satisfy the market demand This necessitates the importation of canned sardinella and tunny from Japan in order to solve the shortage of stock in the Libyan market The only way to solve the problem of shortage of canned fish is to provide facilities for the freezing and storing of the local catch so that the factories could operate beyond the fishing season Also, technical and financial assistance should be provided by the Government to the fishing industry in order to increase the quantity of the fish caught and thus increase the supply to both the fish markets and the factories

7 Olive Processing Factories

There are four olive oil processing factories, two of which are situated within the CBD Two other factories lie within the industrial area of Bab Ben Gashir to the south of Tripoli

The Jefara plain is the major supplying area for the olive oil factories Here there are 1,871,000 productive olive trees, providing the city factories with all their requirements The production of the olive oil is seasonal, beginning in October and ending in January when the harvest is completed The city factories, together with nine other olive factories can satisfy the market needs in Libya in the years when production is high. However, when the olive production is low, the market suffers a shortage of olive oil.

The quality of the Tripolitanian olive oil is not good when compared to that of Tunisia and Spain. "It is claimed that 40 per cent of total oil (olive) production has an acidity content of less than 1½ per cent, 40 per cent between 1½ per cent and 4 per cent (so-called lampante oil, which requires refining), and 20 per cent between 4 per cent and 8 per cent."(5) The chemical composition of Libyan olive oil, in fact, impedes the exportation of olive oil to foreign countries, so it is locally consumed. There are attempts by Italian olive oil factories to improve the quality of olive oil and to make it suitable for export.

The number of workers employed in the olive oil factories was 115 in 1966, and their employment was seasonal.

8. Wine factories

Wine industry also plays an important role in the economy of the city. It began during the Italian rule which encouraged the cultivation of grapes on the Jefara and Tripolitanian Jebel. At the present time there are five wine factories situated in different sites within and outside of the Central Business District. Site location is not significant for wine factories as they operate only during the summer months (July-September), when the harvesting of grapes takes place. A high quality bottled wine is produced Like olive oil, the production of wine depends principally on the quality of the annual harvest, and therefore fluctuates annually (Appendix I Table 10)

Locally produced wine is generally sold on the Libyan market which absorbs large quantities of it because of the presence of the number of foreigners in Tripoli A small proportion of wine is exported to Italy and Germany in good years (Plate 4 11)

All the wine factories are owned by Italians who have long experience of wine production The number of employees, mostly Libyans, fluctuates from year to year but was 63 workers in 1964 (Appendix I Table 10)

9 <u>The tobacco factory</u>

This factory is situated at the northern section of the modern sector near Tripoli Electricity Station, and occupies an area of 2,000 sq metres The factory is owned now by the State Tobacco Monopoly, but it was originally established by the Italian Government in 1932 The original aim was to promote the cultivation of tobacco in the Italian farms, and to create light industries in Libya which could rely on the agricultural products of the Italian farms The factory continued its production until the outbreak of the Second World War in 1940 It resumed production in 1943, and in 1946 the British Military Administration entered into a contract with a foreign company in order to run the factory with more efficiency The Tripolitanian Government took it over in 1951 when Libya became independent

"Under the terms of the agreement, the company issues licences to tobacco growers, wholesalers and retailers in the province, establishes prices for tobacco and tobacco products, and manages a tobacco factory in Tripoli which is the only enterprise of its kind in the country These functions are discharged under the guidance and supervision of the provincial government "(6) This indicates clearly that the cultivation, production and marketing of tobacco are controlled by the company

The Jefara plain and the Jebel Garian are the only areas which cultivate tobacco These farms are ex-Italian and still maintain the strict cultivation of tobacco which is considered a most sensitive plant requiring a great deal of attention The harvest takes place in spring and summer months and the production is transported to the factory in Tripoli for grading The best quality tobacco comes from the Garian region, where it relies in its cultivation solely on winter and spring rainfalls It is far superior to the irrigated tobacco of the Jefara plain

Although the tobacco harvest is seasonal, the factory operates the whole year The factory production of cigarettes and other tobacco products is sold on the Libyan market through the wholesalers The quality of cigarettes is good, but the production of the best quality cigarettes contains Virginian tobacco which is imported from the U S A

The marketing of the Tripolitanian tobacco is very successful because the Libyan cigarettes are popular among the lower income groups in Libyan towns and rural areas The price varies from 1/- to 2/- for a packet of twenty cigarettes, compared with 2/10d for British and 3/8d for American cigarettes This lower price for Libyan cigarettes arises because the government levies an import duty on foreign cigarettes, hence offering some protection for the native brands.

Once again, although the Libyan cigarettes are of medium quality, the State Tobacco Monopoly does not export either raw tobacco or cigarettes to foreign countries Sales of cigarettes and other tobacco products amounted to £L 2,986,160 in 1966, in comparison with £L 276,489 in 1954 (Appendix I Table 11) Clearly, both production and sales could be enlarged by exportation to African or Asian countries which have not developed a tobacco industry

The number of workers employed by the factory was 1,051 in 1966, whereas their number was 500 workers in 1954 The majority of employees are Libyans and mostly semi-skilled, the rest being Italians and other nationalities

10. Beer factory

The beer industry began in 1925 when the first brewery was established by an Italian company called "Berra Oea " The factory is situated now in the Dahra quarter to the north-east of the Central Business District It occupies an area of 14,595 sq metres, of which 5,000 sq metres are built-up area The building is modern and equipped with all the necessary technical requirements (Plate 4 10)

The raw material needed for the industry is imported from Germany The factory produces both bottled and draft beer The production has risen considerably since 1954 when production was 1,418,479 litres, to 4,044,343 litres in 1966 (Appendix I Table 12) This increasing production is due primarily to the increased demand for beer on the part of foreigners and Libyans who consume large quantities, especially during the summer The price of bottled beer is rather high compared with the imported beer This is related to the fact that "Local beer is subjected to an excise tax of £L 4 812 per hectolitre, which is rather high as compared with similar taxes in other countries The import duty on beer varies according to the alcoholic content from £L 6 to £L 9 per hectolitre, but imported beer is free from excise tax In many countries with a domestic beer industry, imported beer is subject to an excise tax in addition to import duty so as to improve domestic production with a reasonable measure of protection "(7) The World Bank recommended that the Libyan Government should consider the adoption of a similar policy in the interest of local industry, but this recommendation has not been put into effect This lack of protection from foreign imports deters the "Berra Oea" factory from operating at its full capacity At the present time the factory operates at only 43 per cent of its full capacity The number of employees

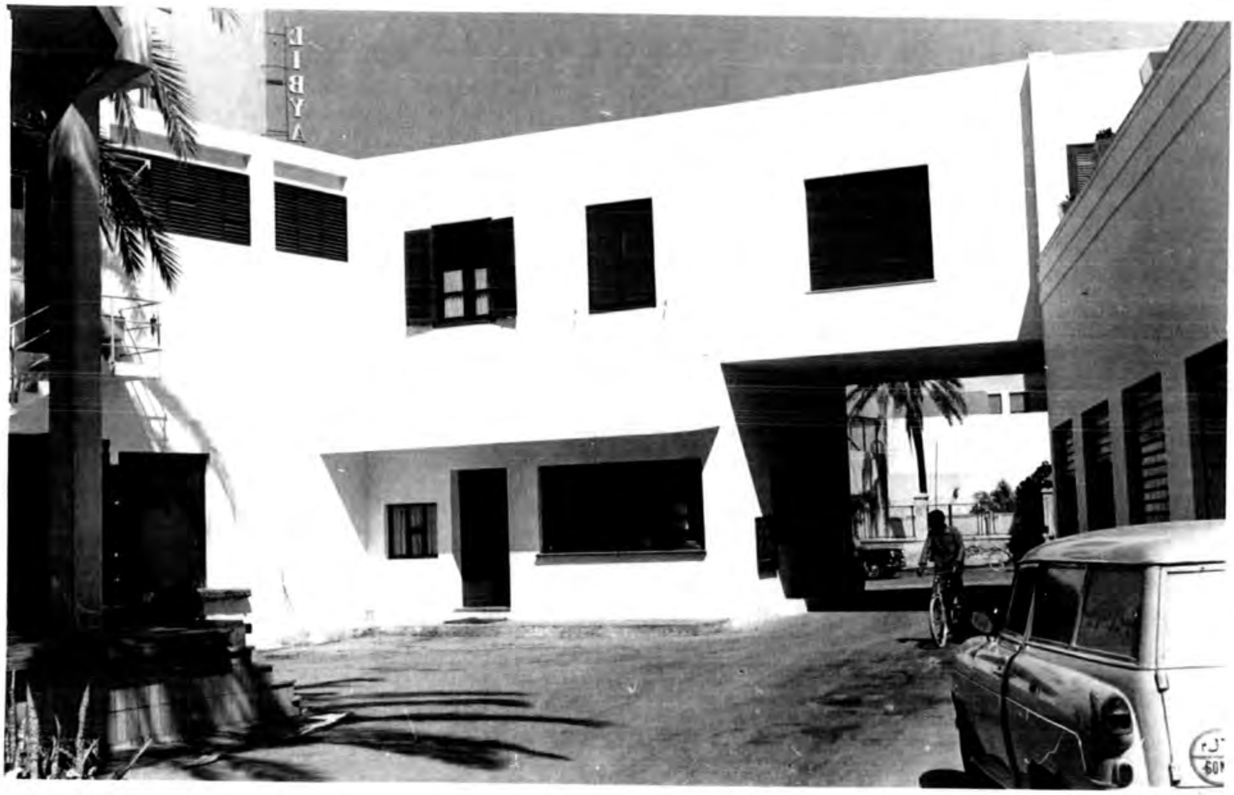


Plate 4.10(A) Oea-Beer plant in Dahra quarter

Plate 4.10(B) Inside the plant

has not exceeded 110 workers during the period 1954-1966

11 Alcoholic beverages

There are nine operating factories producing alcoholic liquids in Tripoli They are located within the CBD occupying different sites These factories are owned by Italian businessmen who established this industry during the Italian rule

The alcoholic beverages are extracted from either barley or dates Both these are locally available The production of alcoholic liquids began 40 years ago Unfortunately, the only available data shows the production only between 1963-1966 (Appendix I Table 13) There is a considerable increase in production in these four years, from 287,458 litres in 1963 to 516,738 litres in 1966, reflecting the increased demand All production is consumed in Libya The employees, mostly Italians, of the alcoholic industry numbered 54 in 1966

12 Soft drinks factories

There are three factories producing soft drinks in Tripoli, situated in different sites (Suani Road, Shara el Srim and Hadba el Khadra) The Industry began during the Italian rule and was developed in recent years by Italian and American firms.

The existing factories produce different kinds of soft drinks such as Pepsi Cola, Kiti Cola, Fanta etc The production of soft drinks increased from 5,259,149 litres in 1963 to 15,267,563 litres in 1966 The latter sales amounted to £L 1,132,884 (Appendix I Table 14) This is related to the high demand for soft drinks especially during the summer months when the temperatures in August can reach 45 7°C The urban population of Tripolitania and Fezzan consume large quantities of soft drinks during this season, but the rural communities consume less, probably owing to the absence of refrigerators in their houses The sales of soft drinks only take place in two regions of Libya, Cyrenaica has its own soft drinks factories No exportation is being undertaken outside the country The number of employees within the soft drinks factories has increased from 160 workers in 1963 to 272 workers in 1966

13 Paper factory

There is only one paper factory in Tripoli It was established by Italian industrialists during the Italian rule But the factory is now owned by a Libyan firm The plant is sited in Bab Ben Gashir area to the south of Tripoli city, occupying an area of 5,700 sq metres, of which 4,500 sq metres are built-up area

The production of the factory depends entirely on the waste paper collected from the Government offices, oil companies, commercial firms etc The factory does not import any raw materials from abroad However, the production of the factory is rising, from 865 tons (£L 38,937) in 1959, to 4,155 tons (£L 231,686) in 1966 (Appendix I Table 15) The increase of the paper production is attributed to the increased demand for paper, particularly by shopkeepers, butchers etc The sole use of paper made by the firm is for wrapping The employees of the paper factory number 138, the majority are semi-skilled Libyan workers The management is Italian and so are all the skilled workers

14 Tannery factory

There is only one tannery factory in Tripoli It is situated to the west of the CBD - near the "Municipality Sports Ground " The factory occupies an area of 1,000 sq metres, and is owned by the Ministry of Industry which established it in 1960 in order to promote the tannery industry and to encourage the private industrial sector to invest its money in such an undertaking The factory employs 32 workers, of whom two are skilled

The factory relies on raw material from local skins of both the Municipal slaughterhouse and private butchers of Tripoli city and Tripolitania as a whole The factory favours using camel and cow skins in tannery processing for technical reasons, and it uses 90 per cent camel skins and 10 per cent cow skins However, the production of the tannery factory has increased considerably in the last few years

4 11 Government Tannery Factory's Production and Sales, Tripoli

Year	Quantity in sq ft	Value in £L
1963	15,000	1,500
1964	40,000	4,000
1965	90,000	9,000
1966	140,000	14,000
1967	240,000	24,000

Source Ministry of Industry, 1968

The development of such an important industry should give rise to the flourishing of the leather manufacture, particularly footwear and local handicrafts The tannery factory would supply all the requirements of the local Libyan market with good quality leather if the Government would invest more capital

15 Shoe factory

This industry was established by a Jewish businessman in 1957 as a subsidiary of an international firm "Bata " The factory is sited within the CBD in Grand Saso D'Italia Street in the Bu Harida quarter, employing eight workers It occupies an area of 800 sq metres

The factory started production in 1957, manufacturing 25,000 pairs of shoes per year The raw material is imported from abroad The production, in fact, cannot satisfy the Tripolitanian market as it can only produce 10-15 per cent of the yearly consumption Although the shoe industry is supported through tariff concessions and import restrictions, it has difficulty in getting a larger share of the Libyan market, because of the consumers' preference for imported Italian and East European footwear whose prices are lower than locally produced shoes In addition, the quality is of considerable importance to the consumers

The shoe industry is thus not well established in the Libyan market This is due to many additional factors, including the lack of the required raw materials owing to the absence of efficient curing and tanning, and of the capital to produce better quality shoes

16 Toilet and laundry soap

There are two factories operating in Tripoli for the manufacture of toilet and laundry soaps, The first is situated in the Gurgi area, occupying an area of 10,000 sq metres, of which 3,000 sq metres are built-up area The second opened in 1967, is sited within the industrial zone near the Suani Road at 3½ ~~m~~ilometres, and occupies an area of 2,000 sq metres Both plants employ 107 workers While the Gurgi plant produces both toilet and laundry soaps "Tide", the second produces only laundry soap "Persil " Both soap plants are operating on behalf of international laundry soap companies, namely Tide of U K and Persil of Germany

The production of laundry soap satisfies approximately 70 per cent of the Libyan market requirements, the rest is imported The production has shown a considerable increase from 398,976 kg in 1959 to 843,513 kg in 1965 In 1966, production declined to 666,880 kgs (Appendix I Table 16) partly because of rising competition from imported laundry soaps such as Omo, Cheer, Daz etc and partly because of insufficient advertisement on the part of the Libyan management for laundry soap

As far as toilet soap is concerned, there is no available data on the annual production in the last few years The management of the Gurgi plant estimate that the average annual production is 1,000 tons This production cannot satisfy the requirements of the Libyan market which consumes more than 3,000 tons per year (2 kg per capita per year), so foreign toilet soaps are imported

Once again, the low production of toilet soap is largely due to the high duty imposed by the local authorities on the imported vegetable oils such as coconut and palm oil which are required for such an industry For example, the import duty on such oils is £L 30 per ton and 25 per cent on caustic soda, whereas the import duty on foreign toilet soap is rather low Therefore the local industry, if it is not protected, cannot compete with foreign soap products The only possible remedy to encourage soap industry is to reduce the import duty on both vegetable oils and caustic soda so as to lower the cost of production and encourage higher production and better quality (8)

17 Building material factories

The building material industry began in 1952, owing to a boom in housing construction in Tripoli Later it developed on a large scale and expanded when the demand for housing accelerated At present there are sixteen operating factories throughout the whole city There is a lower concentration of brick factories within the CBD Here there are only three operating factories Six factories are concentrated within the new industrial zone of the Suani Road Another three factories are sited in the Bab Azizia area The rest are located in Sidi Mesri, Bab Ben Gashir and Gurgi (Plate 4 12) A great amount of capital is invested in these factories, it ranges between £L 10,000 to £L 250,000 as in the case of the gypsum factory Two factories are Maltese and Italian owned, the rest are Libyan

These factories produce different types of building materials such as hollow blocks for walls, structural tiles, and traverse beams for roof construction, clay bricks for floors The production of these factories can satisfy all the requirements of the Tripoli market Unfortunately, there are no available statistics on the annual production of the building material factories for the last few years The number of employees in the building material industry is 620 workers

18 Textile and clothing industry

This industry is also of considerable importance in Tripoli It developed as recently as 1957 when the first textile factory

Plate 4.11 Wine factory in Gurgi

Plate 4.12 Brick factory in Sidi Mesri

Plate 4.13 Battery factory in Gurgi

was established Subsequent factories were established by other Libyans who were formerly working in the traditional textile workshops In other words, this industry developed as a result of the existence of experienced Libyan craftsmen who used to work in a similar industry within the Old Town

There are, in the city, 15 factories (12 textile, one for tailoring, one for underwear and one for ties), in different sites within the city However, 11 factories are concentrated within the CBD, and another four lie in the new industrial zone of the Suani Road and Gurgi area There is, however, a tendency on the part of the textile factories to move from the old industrial sites to the new industrial zone The total areas occupied by textile and clothing industries are 10,520 sq metres

All the various textile factories rely on imported raw materials from France and Italy The number of people working in these industries has increased from 27 workers in 1959 to 287 in 1966

These eleven factories produce various kinds of ladies' barracans and other woven articles for women Production has accelerated considerably in recent years due to the increasing demand for manufactured barracans on the part of Libyan women (Appendix I Table 17), and the total sales have increased subsequently from £L 43,249 in 1959 to £L 1,461,797 in 1966 Most of the textile manufactured goods are sold within the Libyan market, and very small quantities are exported to Chad and Niger where there is some demand for Libyan barracans

19 Furniture industry

The furniture industry is considered to be one of the flourishing industries in Tripoli, partly due to the housing expansion and partly to the rising standard of living of the population of the city There are three large furniture firms sited in different locations within the CBD In addition, there are 39 small wood workshops scattered within the residential areas of Tripoli All the furniture factories depend entirely on their manufacture on the raw material imported from abroad since there is no woodcutting industry in Libya There has been a considerable increase in the quantities of imported wood as shown in the following figures

Table 4 12 Imported wood to Tripoli between 1962-1965

Year	Value in £L
1962	951,800
1963	1,104,717
1964	1,686,770
1965	2,229,596

Source Ministry of Industry, Tripoli, 1967

About half of the wood is imported from Italy and one-quarter from U K , and the rest from different European countries

Both production and sales are rising owing to the existence of customers such as the Ministry of Education which buys furniture for schools It is estimated that such purchases by the Ministry exceeded £L 400,000 in 1966 The furniture consists generally of desks, blackboards, shelves for school libraries and classrooms, and beds for boarding schools Apart from domestic furniture, the above factories produce doors, window frames, stairs etc for new houses and flats All kinds of shop fittings are also produced The number of employees in such industry was 150 in 1966

In addition, there are numerous small wood workshops lying in different parts of the city These have no particular specialization as they produce various types of cheap furniture and they generally work on the basis of the local demand of dealers.

20 Match industry

There is only one match plant which was established in 1962 The plant is situated within the new industrial zone near the Suani Road, occupying an area of 5,000 sq metres, of which 1,000 sq metres are built-up area The number of employees rose from 64 in 1963 to 100 in 1966

Although the production of matches has risen considerably from 14,399,100 boxes in 1963 to 24,940,000 boxes in 1966 and amounted to £L 45,672 and £L 134,619 respectively (Appendix I Table 18), the product has lacked wide acceptance in the Libyan market The low quality and inefficiency of production of the plant has not enabled it to compete favourably with imported matches However, the quality of matches has improved since

1967, mainly due to the Ministry of Industry's advice and technical assistance to the plant

21 Gas and oxygen plants

The gas plant is situated in the Shara Bu Harida quarter to the south of Tripoli, occupying an area of 700 sq metres It was established in 1931 by an Italian firm Since then the plant has continued its operation, supplying all the residential areas of the new sector of Tripoli with its requirements of gas fuel for cooking purposes

The oxygen plant is located in the Milborg Street within the Shara Zawia quarter, occupying an area of 25,000 sq metres of which 1,000 sq metres are built up The plant is specializing in producing oxygen for industrial purposes The employees of both plants number 115, of whom 88 workers are employed in the oxygen plant and 27 workers in the gas plant

22 Paint industry

The paint industry is mainly associated with the boom in building and housing It emerged in 1963 when the first plant was founded in 1965 by a Norwegian firm This was due to the rapid increase in demand for paint for housing and industrial use

These two plants are located in two different sites The first lies in the Bab Ben Gashir area to the south of Tripoli, the second is situated within the industrial zone to the west of Tripoli The Libyan/Norwegian paint plant occupies an area of 3,000 sq metres of which 1,000 sq metres are built-up area, the second occupies an area of 5,960 sq metres of which 1,597 sq metres are built-up area The number of employees within the two plants is 63, of whom 25 are employed in the Norwegian plant

The production of both plants is similar, but the Greek firm produces paint for industrial and motor vehicle use Once again, both plants cannot satisfy the whole market requirements in Libya Consequently the import of paint is taking place, mostly from the U K

23 Dry Battery industry

This industry emerged in 1965 when two dry battery plants were established by two Libyan businessmen The first is sited in Gurgi, occupying an area of 5,000 sq metres, of which 654 sq metres is built-up (capital £L 30,000) The second plant lies within the industrial zone in the Suani Road, occupying an area of 5,000 sq metres of which 1,000 sq metres is built up (capital £L 10,000) The number of employees is 24 in both plants

The production of both factories cannot satisfy the local market needs The Gurgi plant produces 6,200 dry batteries a year, whereas the second plant produces 800 dry batteries This, in fact, cannot keep pace with the total number of vehicles which exceeds 80,000 in Tripoli 7,000 dry batteries represents 8 75 per cent of the overall needs of dry batteries, assuming that each vehicle requires one dry battery per year, so the import of dry batteries is taking place (Plate 4 13)

24 Plastic Industry

There are two plastic plants in Tripoli The first is located at Bab el Azizia and the second is located within the industrial zone of the Suani Road The former has an annual capacity of 960,000 m of all types of pipes and 10,000 m of window blinds, and the production is expected to reach 200,000 m of pipes and 20,000 m of window blinds by the end of 1967 The annual sales of 1966 were as follows -

Table 4 13 Kind of plastic materials manufactured in Tripoli, 1965

Water pipes	16,711 kg
Electric pipes	133,212 kg
Blinds	1,667 kg

Source Ministry of Industry, Tripoli, 1967

This corresponds roughly to 167,000 m of water pipes and 898,000 m of electric pipes This production of the operating plants can satisfy the local Libyan demand for plastic articles for housing and electrical uses It is expected that the imported plastic articles which amounted to £L 389,000 in 1966 will be reduced when the plants are fully operative

25 Aluminium, steel and metallic industries

The aluminium industry emerged in Tripoli in 1960 when the first aluminium factory was established by a Libyan businessman The factory is sited in the 9 August Square within the transitional area between the Old Town and the modern sector The plant occupies an area of 320 sq metres, employing 11 workers The production of the factory amounted to 80,000 kg kitchen utensils in 1966, and it can satisfy one-third of the Libyan market requirements The quality of the products is good and competes successfully with the imported kitchen utensils All raw materials required for this industry are imported from abroad

26 Steel Industry

The steel industry is new in Tripoli, the first plant was established in 1965 It lies within the industrial zone of the Suani Road, occupying an area of 2,000 sq metres, of which 1,732 sq metres are built-up area The plant employs 82 workers of whom 30 are skilled, and it has a capacity to produce 5,000 tons per year of steel rods for concrete reinforcement for housing construction

In addition, there are 8 steel and metallic plants sited in different industrial areas Their industrial specialization varies considerably All these plants employ 377 workers

27 Mechanical workshops

They number 78 and are situated within and outside of the CBD 43 5 per cent are owned by Libyans, the rest are owned by Italians

These mechanical workshops provide services for the vehicles of Tripoli as well as other towns, and their number has increased in recent years owing to the rapid increase in the number of vehicles in Tripoli

28 Printing industry

There are 14 printing establishments in Tripoli, of which one is owned by the Government Others are private ones (7 Libyan and 6 Italian) In general, the printing shops are located within the CBD The printing industry is not well advanced and equipped apart from that of the Government Press and the Libyan Press Company These two presses are highly modernized The Government Press is chiefly concerned with the printing of all official Government publications, such as books, reports, Arabic newspapers and magazines The Libyan Press Company deals exclusively with newspapers, principally Arabic, English and Italian literature, and with some commercial literature

29 Handicraft industry

This industry is important because it contributes to the industrial economy of Tripoli All kinds of traditional handicrafts can be found in the Old Town where they flourish The work is generally done by hand and some with the help of primitive equipment These workshops number 1,506 and employ 3,340 persons The average number of persons is 2 2 per establishment Most of the handicraft workshops are located within the Old Town The rest are scattered within the traditional Arab quarters This handicraft industry comprises various numbers of traditional crafts The most important ones are barracans, carpets, leathers, copper, silver and gold work and jewellery

Although most of these handicrafts have been in existence since the Arab era, they declined during the Italian rule From 1951 onwards, however, the handicraft industries, particularly gold, silver and leathers, flourished This was partly due to the Libyan Government's encouragement, and partly due to the increased demand on these handicrafts from tourists and the foreign community

The distribution of the handicraft workshops within the Old Town can be examined in detail (Fig 4 4)

(a) Leather workshops are located in the handicrafts market of the Suk el Mushir Here there are 14 workshops producing different types of leather footwear and other products such as bags, sandals, slippers, and other fancy goods Other workshops are sited in Suk el Turk These leather goods are generally made of Libyan raw materials, but good quality leathers are imported from abroad However, the leather handicrafts are generally attractive and tend to draw the attention of foreign tourists

(b) Textile workshops are numerous in the Old Town, their number exceeds one hundred They are located primarily in two areas Zenghet el Fenedga and Suk el Harir Barracans made of cotton are manufactured within the workshops of the former area Silk barracans are produced in the Suk el Harir This handicraft industry is more elaborate and decorative, needing very skilled workers The silk barracan is more expensive in the market and demanded by urban Tripoli women only, whereas the cotton barracan is cheaper and demanded by rural customers

(c) Gold and silversmiths have their workshops in three areas Suk el Mushir, Suk el Siagga and Zenghet el Fenedga They number 50 workshops, five of which are Jewish, the rest being Libyan Here the craftsmen produce different kinds of gold and silver jewellery for both urban and rural women The gold work, such as ear-rings, bracelets, is worn by urban women, whereas silver work is used by the rural women of Tripolitania and Fezzan Most of the gold and silver jewellery is sold in the local market of Tripoli, little export taking place to Cyrenaica

(d) The 20 coppersmiths have their workshops in the Suk el Haddada, produce different kinds of kitchen utensils, but face intensive competition from aluminium products, so their number is declining

Tourism

The tourist industry is also another contributory factor to the economy of Tripoli Tourists engage in commercial activities within the traditional and modern shopping areas alike Tourism also affects hotels, restaurants and other entertainment places such as night clubs, public houses Travel agencies and transport companies earn a great deal of money by arranging long and short excursions to the ancient Roman sites of Tripolitania

Several factors can attract tourists to spend their holidays in Tripoli in particular and in Libya in general

Firstly, the warm weather of North Africa, particularly during the autumn and winter months Secondly, European resorts become very congested during this period of the year Therefore some European tourists favour quieter and more peaceful places Thirdly, the physical environments of the arid and semi-arid regions of Tripolitania are entirely different from the physical European environment (oases, sand-dunes, dry wadis, vegetation, etc) Fourthly, the historical remains of Leptis Magna, Sabratha, and ancient Roman castles of the Ghibla (to the south of Tripolitania) are of archaeological interest Lastly, the encouragement of the Libyan government is also of great importance to the tourist trade

Table 4 14 Number of Tourists and Total of Nights, 1959-1966, Tripoli

Year	No of tourists	Total of nights
1958	16,658	-
1959	16,695	-
1960	24,968	-
1961	23,689	-
1962	31,957	82,941
1963	83,914	346,296
1964	60,999	309,308
1965	65,340	366,200
1966	43,832	262,871

Source Ministry of Economy and Trade, Department of Tourism, Tripoli, 1966

It can be seen from Table 4 14 that the number of tourists who visited Tripoli during the last nine years (1958-1966) has fluctuated For example, their number has increased considerably from 16,658 tourists in 1958 to 83,914 tourists in 1963, an increase of 403 7 per cent Subsequently, the number of tourists has declined to 43,832 in 1966, representing a 52 2 per cent decrease This recent decline arises partly because there is a shortage of hotels to accommodate a large number of tourists who visit and want to stay for several days The existing hotels charge between £L 3-5 per night on average This high price does not enable the tourist to stay for more than a few nights The first class restaurants charge between 20-30/- for one meal The lack of cheaper entertainment is also responsible for the decline in the number of tourists

Tourist statistics for 1963, 1964, 1965 and 1966 show that tourists visited Tripoli all year round (Appendix I Table 19) In other words, the arrival of tourists occurred in all months with some rise in their number in winter and spring seasons

The annual distribution of tourists by months in 1966 shows that the number of tourists was nearly equal for November December, June, July and August February, March, April and May had equal proportions of tourists This is probably due to the desire of foreign tourists to visit Tripoli in late summer and spring The months of September, October and December registered the lowest figures

Most of the tourists come to Tripoli by air, particularly Europeans and Americans They represented the majority of the total tourists One reason for this is that Europeans and American tourists are more attracted to visit Libya Most of these tourists come to Tripoli for either to visit their relatives or by through excursions arranged by travel agencies The second reason is related to the ability of western tourists to spend money on travel, accommodation, meals, etc However, most of these tourists come to the city by regular schedule flights or by charter tourist flights or flights organized by a tourist agency Tourists who came from North West Africa, and who visited Tripoli in 1966, arrived by road travel which is the cheapest means of transport Cruise ships were also another important source of tourist traffic

Government officials of the Tourism Department of Tripolitania estimate that the average expenditure of the tourist was £L 10 per night in 1966 Therefore the money spent by tourists of different nationalities amounted to over £L 2,600,000 in 1966 This was generally spent on accommodation, food and travel within the country This expenditure of tourists could be increased if more tourist hotels are constructed within the city and inflation is checked

Conclusion

It can be seen that the industrial function of Tripoli is therefore important playing a significant role in the economy of the city Although the industrial development had begun as early as the Italian rule, the most industrial expansion took place after the Independence of Libya and the discovery of oil The increase in the number of skilled population and the availability of foreign and Libyan capital, together with the growing demand for goods, contributed enormously to the recent industrial development Modern industries are more important than the traditional industries owing to the impact of westernization and the availability of capital to run modern industries Nevertheless, the traditional industries are still functioning, particularly those industries which specialize in the production of traditional dress, oriental gifts and souvenirs

However, the number of modern industries is increasing rapidly and this is likely to result in Tripoli becoming in the future the largest industrial city in Libya and one of the main industrial cities in North West Africa.

The tourist industry is also an important industry in Tripoli It contributes enormously to the economy of the city in many respects such as new hotel building, creating a tourist town to the west of Tripoli in Gargaresh and in encouraging the traditional handicraft industry

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CHAPTER V

TRANSPORTATION

The transport system within Tripoli is one of the most important aspects of the urban life of the city Both modern and traditional means of transportation are important elements of the city economy As is characteristic of many cities in the developing countries of Africa and Asia, motor vehicles, horse and donkey-drawn carts, barrows and handcarts are all operating side by side in the city today In Tripoli, however, the recent economic and social developments have brought a great deal of change in the transport system, although they have not destroyed the traditional means of transport entirely Increasing mobility of the active population, growth of commercial and industrial activities as well as improvements in the standard of living are all factors contributing to the increase in the number of motor vehicles and lorries within the city The street pattern and the provision of parking facilities are of great importance to the traffic volume and direction within the city Finally, the port of Tripoli is most important in the determination of the traffic flow of the city, contributing enormously to the commercial and industrial activities in the city through the import and export of goods

5 1 MEANS OF TRANSPORTATION

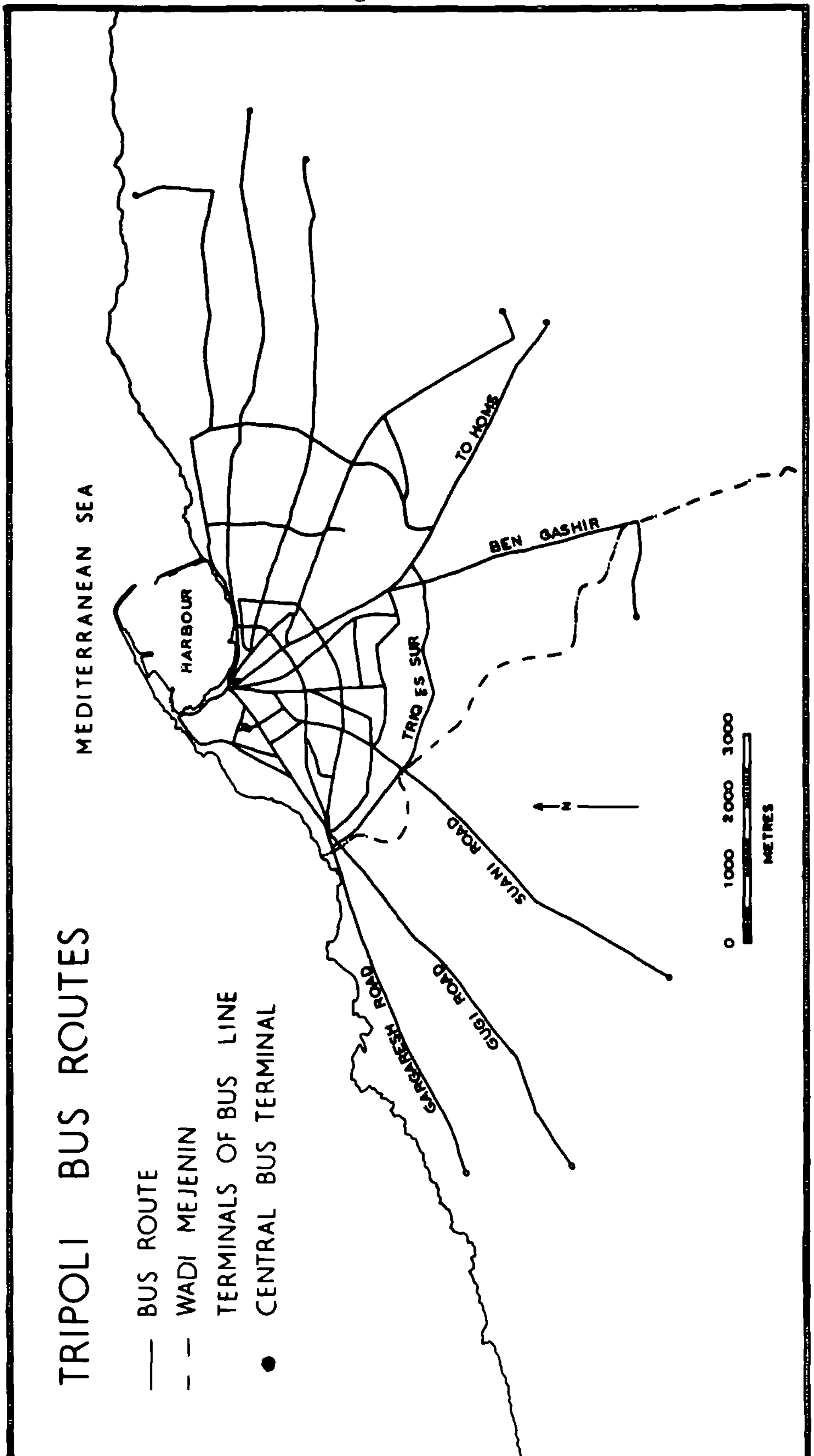
Tripoli has two types of transportation modern and traditional The former can be classified into three categories Private cars, taxis and public buses

(a) Private cars They have increased in number from 20,000 in 1956 to 80,000 in 1967 These cars are generally owned by the higher and middle income groups The increase in number of cars is due partly to the existence of hire purchase facilities, and to the low customs duty (25 per cent) About one-third of these cars are owned by foreigners, the remainder by Libyans A high proportion of these cars are French, German and British American cars are chiefly owned by the Americans and wealthy Libyans, because of their relatively high cost

(b) Taxis They are not numerous in 1967, there were only 184 operating within the Tripoli city limits Taxi meters are not used, so there is no such thing as a fixed fare The cost can be high, even for short journeys, e g five kilometres costs 10/- Taxis are chiefly hired by tourists and high income groups The local authority attempted to force taxi-owners to install taxi meters, but so far it has not overcome their resistance

(c) Public buses These are the only modern means of transportation for the majority of the population of the city (Fig 5 1) There are five bus lines serving the eastern part of

Figure 5 1


TRIPOLI BUS ROUTES
BUS ROUTE
WADI MEJENIN
TERMINALS OF BUS LINE
CENTRAL BUS TERMINAL
MEDITERRANEAN SEA
HARBOUR
TO HOMS
BEN GASHIR
TRIQ ES SUR
SUANI ROAD
GUGI ROAD
GARGARESH ROAD
N
0 1000 2000 3000
METRES

Tripoli, linking it with the Suk el Juma area The first of these bus lines operates between the city and the eastern part of the city They are of considerable importance because they provide transport facilities for a large number of the population of the city and Suk el Juma which had a population of 61,937 in 1964, and particularly those who come to the city either for working or shopping There is an intense pressure on buses between the hours 7-9 a m and during the evening hours between 5-9 p m , when people return to their homes The five bus services also provide transport facilities for four Tripoli quarters (Plate 5 1)

The second group of bus routes extends into the south-eastern part of Tripoli metropolitan area, linking the city with the neighbourhoods of El Fornaj and Sidi Mesri These bus services provide transport facilities to the work-places for the inhabitants of the above two areas The buses also serve the Libyan University students of the Faculties of Science, Agriculture, Engineering and Teaching

The western and south-western bus services consist of three lines Gargaresh, Gurgi and Fl Fellah Here buses provide transport facilities for people living within the residential areas as well as for the employees of the industrial zone of Tripoli of the Suani Road (population 26,188 in 1964)

There are other bus services operating in the southern part of Tripoli, serving four quarters of the city (the Shara el Zawia, Shara el Bey, Bu Harida and Shanty Town (population

Plate 5 1(A) En Nesı Transport Company's Garages ın Gurgı

Plate 5 1(B) Buses of En Nesr Transport Company

51,937 in 1964)

In addition, there are also circular bus services operating within the CBD and linking the eastern areas with the western parts of the city and particularly where the wholesale market is situated

The total number of buses operating within the city and its metropolitan region is 60 An additional 21 buses operate only during the rush hours in the morning and evening All these bus services are inadequate to cope with the needs of the population of the city Consequently, the congestion on buses is acute For example, the average number of travelling passengers is between 60-90 during the rush hours This is far above their normal capacity and causes a great deal of discomfort to the passengers, especially as the company's buses have only one deck

Also the absence of effective and reliable timetables for the operating buses, and lack of facilities for the standing passengers, makes public transport travelling unpleasant This is partly due to the fact that public transport is monopolised by a single transport company, and partly to the lack of adequate supervision on the part of the municipal authorities

About 50,000 of the population of Tripoli make bus journeys per day either to the CBD or to the industrial zones of the city Regular trips are the most important daily movement of the working population The trips take place between the suburbs of Tripoli and other villages beyond the city limits to the city Here the trips involve workers, shopkeepers, and students of primary, secondary schools, and the Libyan University. Cross trips are also undertaken by workers who have jobs within the industrial zones of Tripoli Scattered trips are undertaken by the inhabitants of the residential areas of the city Here people make a number of daily trips to the CBD for shopping, entertainment, or medical visits to doctors

Table 5 1 Distribution of daily journeys to work, Tripoli, 1967

	Bus Line	Direction of journey	No of journeys	Av No passengers
1	Dahra-Suk el Juma	East	56	3,360
2	Arada-Suk el Juma	East	56	3,360
3	Amrus-Arada	East	56	3,360
4	Zenata-Arada	East	56	3,360
5	Jama Bent el Bay		70	4,200
6	Sidi Mesri-Furnaj	South-east	56	3,360
7	Gargaresh	West	84	5,040
8	Gurgi	West	56	3,360
9	Fellah	West	84	5,040
10	Hadba el Khadra	South-west	70	4,200
11	Accara-Sh el Zawia	South	36	2,120
12	El Ezaa	South	56	3,360
13	Circle No 1	CBD	18	1,080
14	Circle No 2	CBD	18	1,080
15	Circle No 3	CBD	18	1,080
16	Circle No 4	CBD	28	1,680
	Total		818	49,040

Source Field Work Survey, Tripoli, 1967

It appears from Table 5 1 that the eastern trips form 35 9 per cent of the total, western trips constitute 27 4 per cent, trips within the Central Business District form 10 per cent Trips to the southern part of the city constitute 11 2 per cent, whereas other trips to the south-west and south-east represent 15 4 per cent The distribution of trips reflects the movement of the population from the residential areas to the Central Business District, and vice-versa Trips which take place within the Central Business District are generally for shopping and entertainment

(d) The number of heavy vehicles has risen in recent years owing to the increase in the commercial and industrial activities and oil developments The existing number of heavy vehicles is about 5,000, (the total number of heavy vehicles in Libya was 25,625 in 1967) and they provide the transport services for the metropolitan area as well as for the whole Tripolitanian region A high proportion of these vehicles serve the port area and transport all different kinds of goods from the port to the warehouses within the city and its region. Some of these vehicles serve only the oil companies, others provide transport facilities for the agricultural products of the rural areas

The number of people who are employed in heavy motor transport is 5,194 of whom 4,733 are Libyans (91 1 per cent), the rest being Italians

Traditional means of transport

Tripoli has various types of primitive transport facilities which are only used within the Arab residential areas and traditional shopping centre For example, carts pulled by men are still used within the Old Town for transporting goods and furniture which cannot be transported by lorries owing to the narrowness of the streets The number of carts of this type is about 150 and is decreasing, being replaced by donkey carts in the Old Town, and elsewhere being superseded by more modern types of transport, e g motor vehicles

There are over 300 carts drawn by donkeys Their use is confined to the Arab residential areas outside the Old Town and the traditional retailing area, as well as the whole trading zone

About 200 horse-drawn carts operate generally between the port and the wholesale trading area They transport goods and heavy materials, and are particularly useful for transporting furniture This type of vehicle is still functioning within the city mainly because the cost of transportation by this means is less than by lorries

Horse-drawn landaux, which number 287, are another means of local transport They operate within the city limits where they have special parking areas These landaux are more popular than taxi-cabs owing to the fact that they are cheaper They are also more convenient and are particularly favoured by Libyan women who find them more satisfactory than taxi-cabs for social reasons (Plate 5 2) The majority of their business

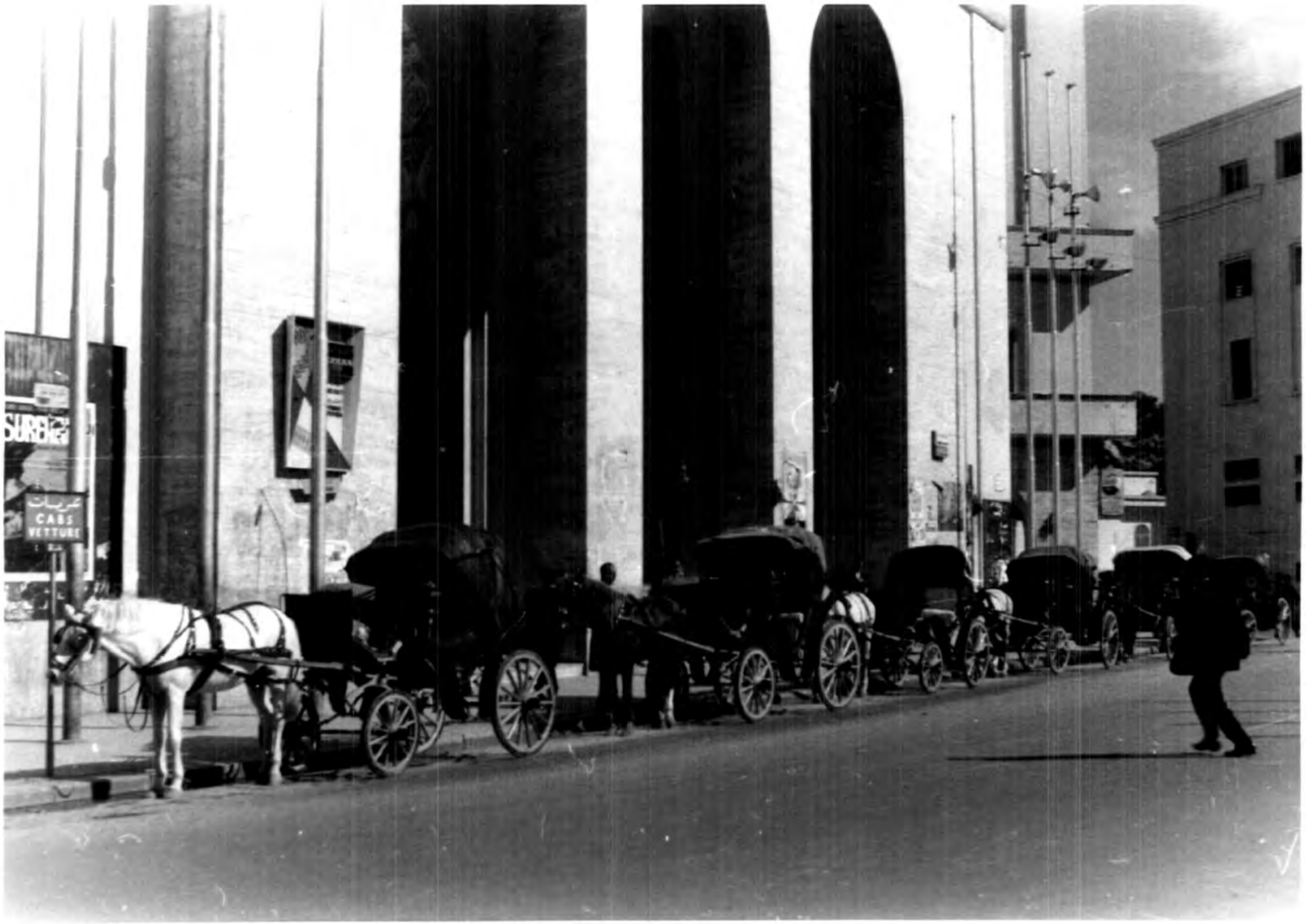


Plate 5.2 Traditional means of Transport (landaux) in Algeria square

takes place ın the mornıngs and the evenıngs (3-8 p m)

5 2 STREET PATTERN AND TRAFFIC VOLUME

An examınatıon of the street pattern ıs necessary for a full understandıng of the traffıc flow and traffıc volume and their problems wıthın the cıty and ıts metropolıtan area

The street pattern of Trıpolı takes the shape of the cobweb which has only one advantage (ı e shortenıng trıps) over the conventıonal grıd model (Fıg 5 2) (1) But the cobweb system of Trıpolı has several dısadvantages Fırstly, orientatıon of all radıal traffıc occurs towards the centre whıch can become congested and ultımately ımpassable Thıs ıs partıcularly true for the Maıdan As Shuhada whıch represents the traffıc centre of Trıpolı (Plate 5 3) Secondly, the cobweb system tends to add streets wıthın ıts establıshed matrıx The tendency for these streets to ıntersect wıth establıshed four-poınt ıntersectıons ıs great and often leads to the creatıon of overloaded crossıngs wıth problems sımılar to the cıty centre Such poınts as Bab Ben Gashır and Medaglıo d'Oro are cases ın point (Fıg 5 2) Here the grıd system has an advantage over the cobweb system In other words, the addıtıonal streets wıthın the grıd system are usually necessary at the perıpherıes of the area Thırdly, the cobweb model stands up well ın comparıson wıth other street systems only so long as ıt ıs retaıned ın ıts intended form Once the cobweb ıs modıfıed sıgnıfıcantly, ıt begıns to faıl to perform ıts ıntended functıon of dıstrıbuting traffıc over a

Figure 5 2

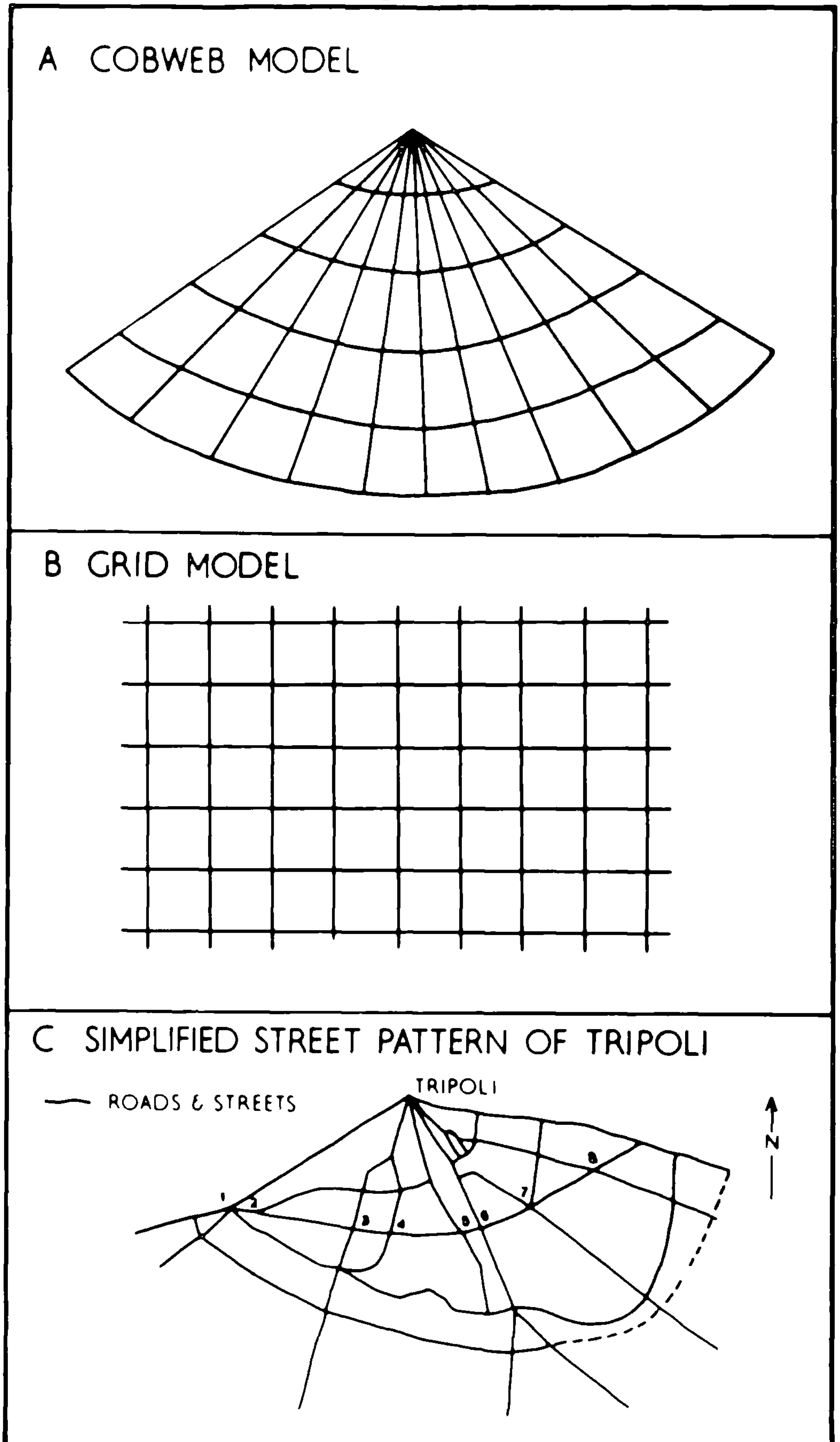

A COBWEB MODEL
B GRID MODEL
C SIMPLIFIED STREET PATTERN OF TRIPOLI
ROADS & STREETS
TRIPOLI
N

Plate 5.3 The core of the central business district at Maidan As Shuhada

wide area of the city Superimposed on the cobweb model, the Tripoli street system loses its inherent advantage, circumferentials, for example, which should originate at regular intervals along radial streets, are found concentrated in the Bab Gargaresh area (Point 1)

Generally speaking, the existing cobweb model within Tripoli, together with the orientation of most of the city traffic towards the downtown area and other commercial streets, creates traffic problems for the local authorities Moreover, it impedes the traffic flow and delays motorists from getting in to the central business district

Tripoli has two types of street pattern old and modern The former is found in the Old Town and other Arab residential areas (see Chapter 2) Here the street system is mediaeval and characterized by narrowness of the streets and its many cul-de-sacs (Fig 2 2) The streets are therefore impassable for modern means of transport, and are only convenient for primitive local transport such as carts, wagons and horse landaux

The modern street pattern is found in the new sectors of Tripoli Here the street pattern is classified as major streets, minor roads, and main roads (Fig 5 3 and 4)

The major streets include Adrian Pelt, El Baladia, Istiqlal 24 December, Mizran, Amr Ibn El Ass, Omar el Mukhtar, El Rashid, Maamun El Maari, Baghdad, An Nasr, Mohamed Ali Essanussi etc These streets carry the heaviest traffic volume (usually in

Figure 5 3

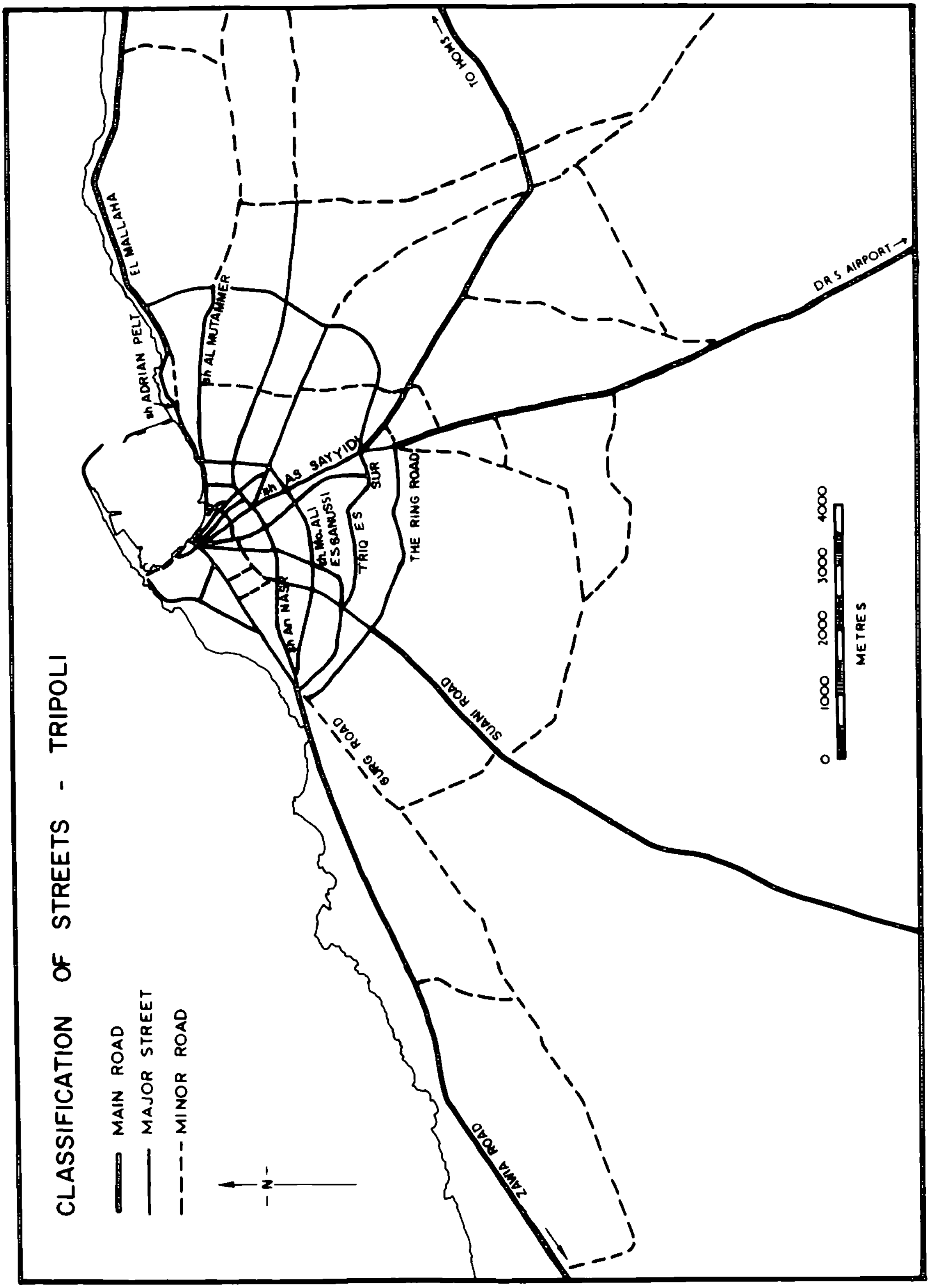
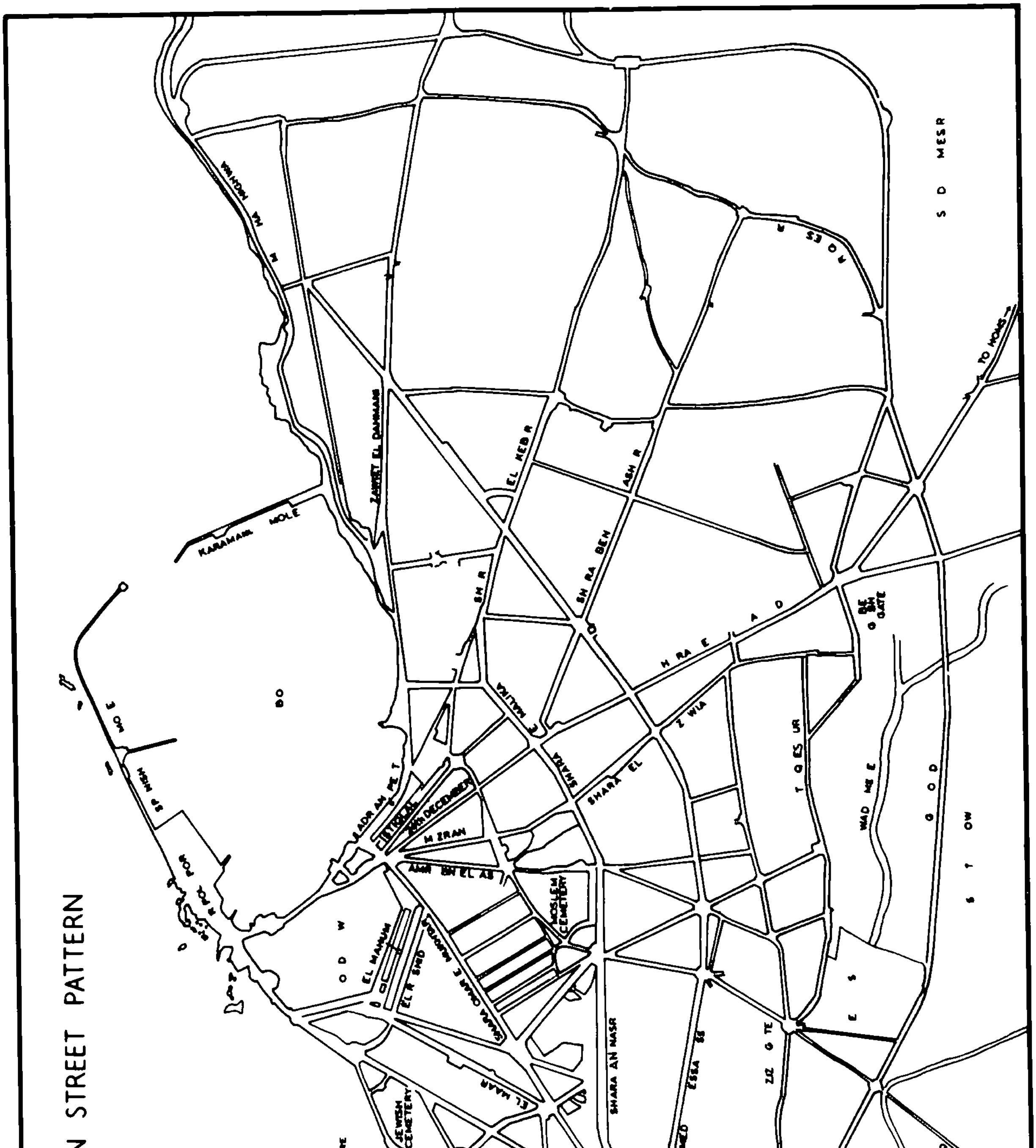

CLASSIFICATION OF STREETS - TRIPOLI
MAIN ROAD
MAJOR STREET
MINOR ROAD
N
TO HOMS
EL MALLAHA
Sh ADRIAN PELT
Sh AL MUTAMMER
Sh AS SAYYIDI
Sh Mo. ALI ES SANUSSI
TRIQ ES SUR
THE RING ROAD
Sh An NASR
SUANI ROAD
GURG ROAD
ZAWIA ROAD
DRS AIRPORT
0 1000 2000 3000 4000
METRES

Figure 5 4


TRIPOLI MAIN STREET PATTERN
KARAMANLI MOLE
ZAWIET EL DAHMANI
EL KEBIR
24th DECEMBER
AMR IBN EL AS
MOSLEM CEMETERY
JEWISH CEMETERY
SHARA AN NASR
GARGARESH GATE
TO HOMS

excess of 1000 vehicles/typical hour) and significant truck traffic (usually in excess of 100 trucks/typical hour) These streets vary in their width (6-14 km) and entire length (1-4 kilometres), and some do not connect with other main roads

The major street pattern comprises both one-way and two-way streets The first is found particularly in all commercial streets of the downtown area of the modern sector such as Istiqlal, 24 December, Mizran, Amr Ibn Ass, Cairo and Baghdad (Plates 5 4 and 5) The second includes Omar el Mukhtar, El Rashid and Maari (Fig 5 5) The streets of one-way system were designed by the ex-Italian Administration for two-way traffic This was due to the Italian plan of streets and partly to the limited number of vehicles, which did not exceed 4,000 at the end of the Italian rule This number, in fact, represents only 5 per cent of the total number of vehicles at the present time Therefore the local authorities in Tripoli were obliged to modify the Italian system of the traffic to one-way streets within the downtown area This new system was introduced in order to enable the streets to function properly and cope with the heavy traffic exerted on the downtown area of Tripoli

Omar el Mukhtar is one of the principal means of traffic access to the downtown of Tripoli and the only major street leading to the western part of the city

The 24 December Street also carries a heavy volume of traffic, all of which is directed away from the downtown Tripoli

Figure 5 5

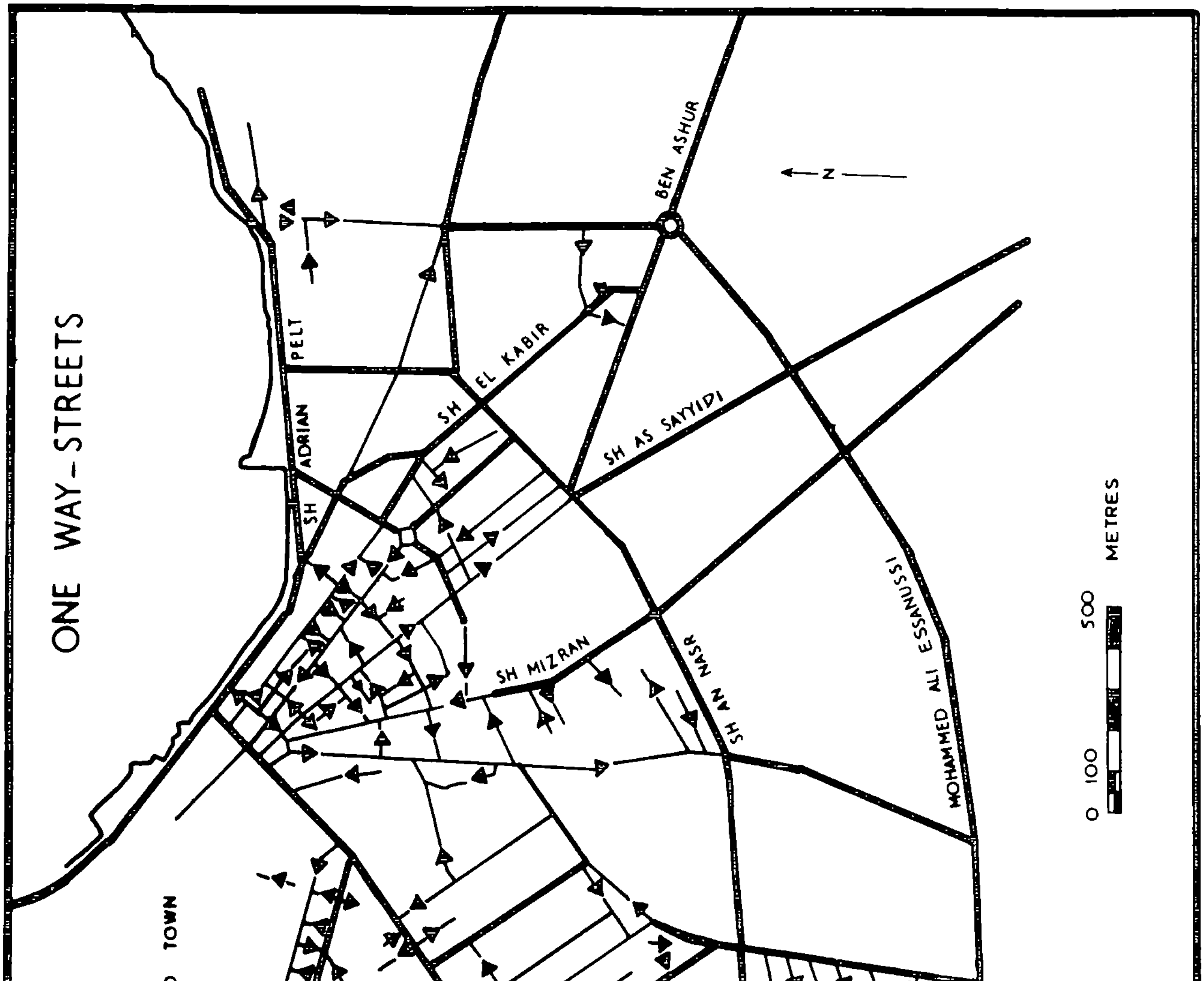

ONE WAY-STREETS
N
BEN ASHUR
PELT
SH EL KABIR
SH ADRIAN
SH AS SAYYIDI
SH MIZRAN
SH AN NASR
MOHAMMED ALI ESSANUSSI
OLD TOWN
SH OMAR EL MUKHTAR
0 100 500 METRES

Plate 5.4 Congestion of vehicles in Mizran street

Plate 5.5 Congestion of traffic in 24 December street

Here the street is to be considered similar in its dual role to that of Omar el Mukhtar i e it carries large amounts of traffic, and serves adjacent commercial establishments simultaneously

Mizran, Istiqlal and Amr Ibn el Ass Streets have similar traffic function i e carrying high traffic volume from the middle zone to the core of the central business district It is interesting to note that the location of the Maidan As Shuhada "the square or roundabout" at the top of the above streets is significant Here the square receives all traffic flow generating from the south In other words, the square represents the centre of the cobweb model upon which the city traffic system is based (Figs 5 6 and 7) It handles a great amount of traffic exceeding its normal capacity limit This is related to its site significance and its accessibility to the commercial streets located within and near the core of the central business district

Adrian Pelt Street is also of primary importance to the urban traffic of the city It is situated along the sea coast of the city, extending from Castle Square to the Karamanli mole to the east of Tripoli harbour (Plate 5 6) Most of the street traffic (42 per cent) either originates or terminates near the Castle Square Another 18 per cent of the street traffic volume crosses the Maidan As Shuhada on through trips originating and terminating far from that point The rest of the build-up of the street traffic, 40 per cent, takes place

Plate 5.6(A) Adrian Pelt street : northern section.
Note the street parking.

Plate 5.6(B) Adrian Pelt street, middle section.
Note the traditional means of transport.

between the central Libyan Government office complex and the Khalid Ibn el Walid Street as well as between the Waddan hotel and intersection of the Adrian Pelt and 21 November Streets

An Nasr Street is located to the south of the central business district and the north of the middle zone Thus the street contributes enormously to the traffic flow generating from both the central business district and the middle zones The street also links the eastern part of Tripoli with the upper class residential areas of Gargaresh and Giorgimpopoli It is interesting to note that the street was constructed by the Municipality in 1965, in order to relieve the traffic flow exerted on the central business district

The minor roads are located throughout the central busines district, middle and outer zones of Tripoli They are often of short length, but they invariable terminate at a major street or another minor road They are also frequently used as substitute for major streets and thereby become seriously over used, and some are congested, such as the Shara el Zawia, Shara el Kebir, Triq Es Sur etc The minor roads are only intended to carry traffic between major streets and main roads, and they are expected to carry a large volume of traffic at a moderately high speed

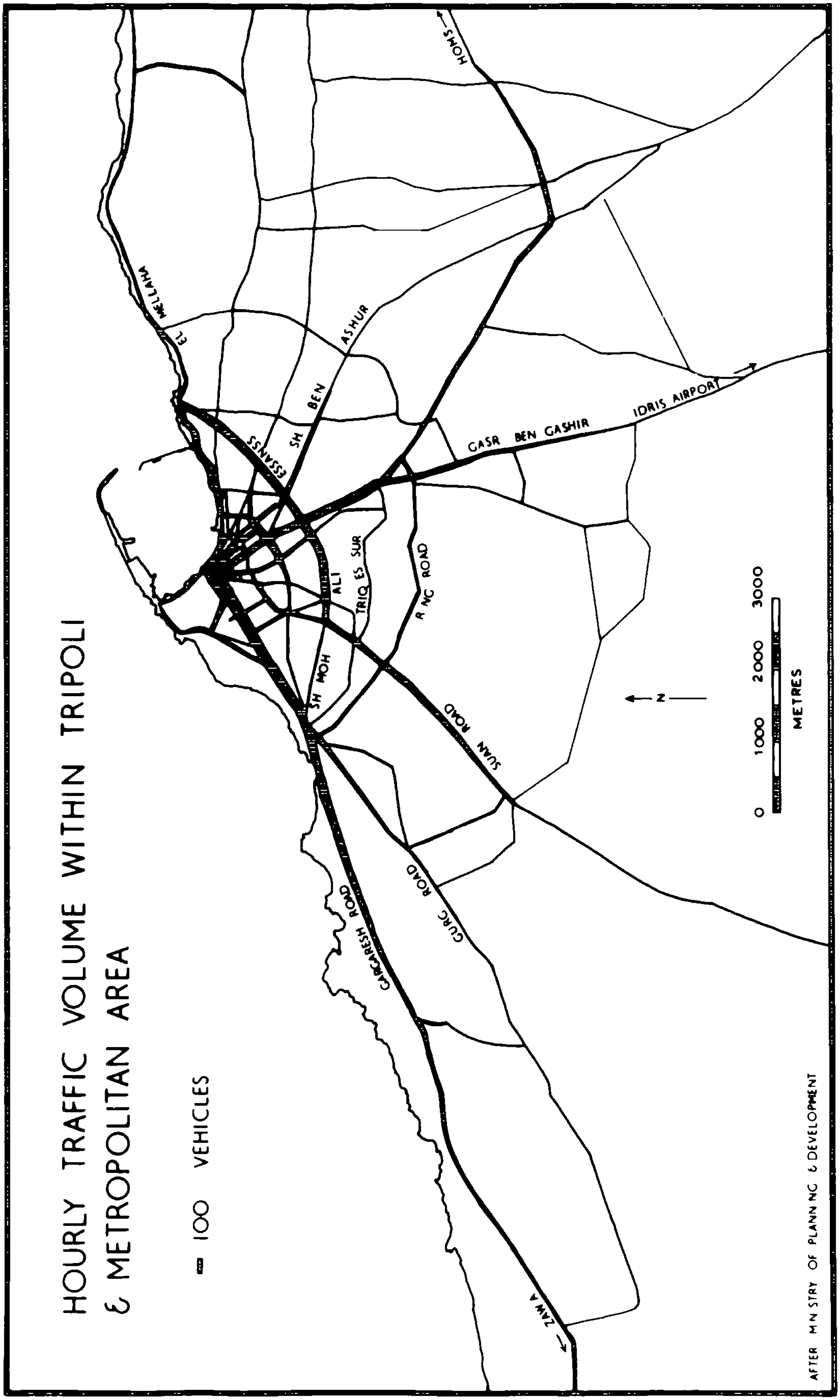
Main roads include Mallaha, Tripoli-Homs, Tripoli-Idris Airport, Suani-Azizia and Gargaresh-Zawia Each of these roads can be described as "legs" or carriers of large amounts of traffic, including trucks from and areas outside Tripoli city While the types and volumes of traffic on each of these "legs" may differ considerably, all these main roads can be considered the major sources of traffic entering Tripoli as well as primary outlets for traffic leaving the city

Mallaha Road is located to the east of Tripoli linking the city with the Wheelus Field (American Air Base 7 km to the east of Tripoli) The road was constructed by the American Air Force in 1962 to serve the base The road is the most well constructed It is 30 m wide and 7 kms long It provides also transport services to the Suk el Juma district

Tripoli-Homs Road links the city with Homs, Misurata as far as Benghazi and the eastern Libyan border The road receives a great deal of traffic coming from the east as well receives all traffic coming from the main eastern regional road The peak hour of the traffic occurs at the early morning 7-9 a m and at 5-6 p m Bab Ben Gashir is situated to the south-east of Tripoli and links the city with Idris Airport (26 km to the south of Tripoli) It is very important to the urban traffic of the city, because it receives a considerable amount of traffic through Shara Sayyidi The peak hour occurs between 12-1 p m , when the oil companies' employees return home during the lunch hour The traffic flow is high, particularly between 8-9 a m , 1-2 p m , and 5-7 p m (Fig 5 6)

Suani Road links the city with the industrial zone as well as with other interior towns of the Jefara Plain and Jebel Garian, and is considered one of the busiest main roads of

Figure 5 6


HOURLY TRAFFIC VOLUME WITHIN TRIPOLI
& METROPOLITAN AREA
100 VEHICLES
HOMS
EL MELLAHA
SH BEN ASHUR
ESSANSS
GASR BEN GASHIR
IDRIS AIRPORT
SH MOH ALI
TRIQ ES SUR
RING ROAD
SUAN ROAD
GURG ROAD
GARGARESH ROAD
ZAWIA
N
0
1000
2000
3000
METRES
AFTER MINISTRY OF PLANNING & DEVELOPMENT

Tripoli, because it serves not only the city itself, but also other parts of Tripolitania The automobile traffic exerts heavy pressure on this road, particularly in the early morning between 7-9 a m and between 1-2 p m and 5-6 p m During these hours the road has a great deal of heavy traffic which can lead to delays of a quarter of an hour or so, primarily due to the fact that there is a high proportion of employees work within the industrial zone (Plate 5 7)

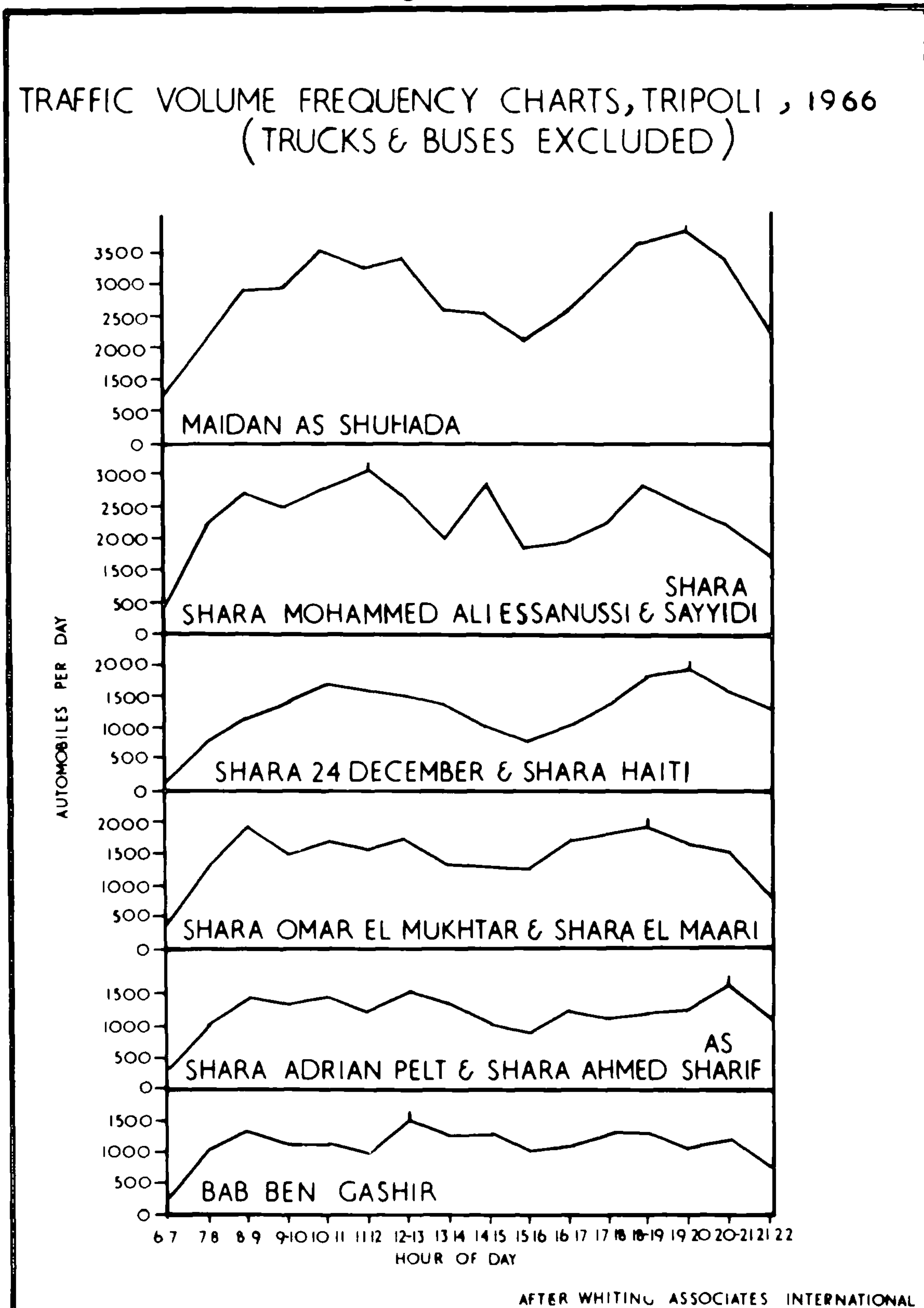
Gargaresh-Zawia Road is situated to the west of the central business district linking the city centre with Gargaresh, Zawia and other major towns of the coastal zone The road terminates at the western border Therefore the road receives a high amount of traffic from the city to the upper class residential areas of Giorgimpopoli and Gargaresh as well as between Zawia and Tripoli The road carries a heavy traffic flow especially during the morning between 7-10 a m and in the evening between 6-8 p m (Fig 5 7)

The existence of several intersections both within and outside of the Central Business District of Tripoli is also of great importance to the traffic flow The Maidan As Shuhada is the most important intersection within the downtown area of Tripoli It is situated at the extreme north of the modern sector and to the south of the Old Town Here the intersection of the Maidan is overworked and heavy traffic pressure is exerted on the roundabout, particularly by vehicles entering the downtown area from the Omar el Mukhtar, Mizran and Adrian

Plate 5.7(A) Traffic flow at Azizia Gate

Plate 5.7(B) Azizia Gate.
Note the poor plan of the intersection.

Figure 5 7


TRAFFIC VOLUME FREQUENCY CHARTS, TRIPOLI, 1966
(TRUCKS & BUSES EXCLUDED)
MAIDAN AS SHUHADA
SHARA MOHAMMED ALI ESSANUSSI & SHARA SAYYIDI
SHARA 24 DECEMBER & SHARA HAITI
SHARA OMAR EL MUKHTAR & SHARA EL MAARI
SHARA ADRIAN PELT & SHARA AHMED SHARIF AS
BAB BEN GASHIR
AUTOMOBILES PER DAY
HOUR OF DAY
6 7
7 8
8 9
9-10
10 11
11 12
12-13
13 14
14 15
15 16
16 17
17 18
18-19
19 20
20-21
21 22
0
500
1000
1500
2000
2500
3000
3500
AFTER WHITING ASSOCIATES INTERNATIONAL

Pelt Streets Therefore the Maidan As Shuhada has the heaviest traffic, not only in Tripoli, but in the whole of Libya

The intersection of the Omar el Mukhtar with the Maari Streets is narrow and congested, one side of which, from the Omar el Mukhtar Street to the Maari Street, is difficult to negotiate There is heavy traffic exerted constantly on this intersection from three main roads This is due to the proximity of the intersection to the CBD and the port area

An Nasr Street has three intersections situated in different sites, none of which are adequate to cope with heavy traffic exerted on the street Apart from the volume of traffic, they are of faulty design, being either semi-roundabouts, or having no roundabout spaces

Maidan el Jazaer (Algeria Square) intersection is situated between the Roman Catholic cathedral and Tripoli Town Hall It functions satisfactorily as a roundabout but fails completely when it assumes its dual function as a parking place For example, the incidence of double parking, and drivers searching for parking spaces, tends to clog this roundabout to a point where traffic flow is often seriously impeded

The intersection of Haiti and 24 December Streets is characterized by extremely narrow approaches to the traffic signal, particularly along Haiti Street This constriction serves to reduce capacity at this point and there is urgent need to reshape the whole street so as to connect it with the

Muneider Street to enable the Haiti Street to cope with heavy traffic exerted on it Once again the intersection of Haiti and 24 December must be reshaped in order to function satisfactorily and reduce over-capacity exerted on the Maidan As Shuhada (Plates 5 8 and 9)

There are another seven intersections situated in different sites along Mohammed Ali Essamussi Street They are too close to be permitted to operate independently of each other Without some synchronization between the two red and green signals the traffic flow along the street is seriously disrupted and in danger of building up from Sayyidi Street to Zawia Street Also the intersection at the Sayyidi Street is further burdened by the entrance to the Tripoli Central Hospital which operates as a fifth point of the intersection The hospital entrance poses a serious traffic hazard, particularly in the case of fast moving vehicles such as ambulances Consequently, the traffic at this intersection is only permitted to turn left in two of the four possible alternatives and the resulting delays in traffic flow are considerable

Medaglio d'Oro, which constitutes the fifth point roundabout, accommodating two major streets (El Maazi and Ben Ahur) and one minor road (Khalid Ibn el Walid), is poorly designed, requiring vehicles entering Mohammed Ali Essanussi to back up considerably and thereby block the flow of other traffic

The two intersections of both Fashlum and El Mutammer are

Plate 5.8 Maidan Ash Shuhada which represents the top of the coweb system.

Plate 5.9 Castle Square

very poor and cannot cope with the generation of the heavy traffic Further, there are two important intersections, namely Bab Gargaresh and Bab Ben Gasnir They are located outside of the Central Business District Bab Gargaresh lies to the west of the city and it is used by large amounts of traffic, including a significant amount of heavy trucks and buses, the traffic is forced to negotiate a makeshift roundabout at the intersection of the streets of the Omar el Mukhtar, Mohammed Ali Essanussi, Zawia and Gurgi roads Here the intersection becomes very blocked up with heavy traffic which is generated from various roads and flows into the intersections, and without the assistance of at least one traffic policeman, the traffic movement is impossible

5 3 PARKING

There are about 5,599 parking places in Tripoli, 838 (15 per cent) of which are considered as either illegal or located on the pavements of the commercial streets, namely Omar el Mukhtar, 24 December, Istiqlal and Mizran Most of the major parking places are situated within the Central Business District They vary in area from one to another The most important ones are as follows -

1 The Castle Square, between the castle and the modern sector, can provide parking places for about 100 cars

2 Tersana Square, located at the front of the Bank of Libya along the seaside About 200 cars can find parking facilities here The Tersana Square is generally used by the

officials of the Bank of Libya as well as by others (Plate 5 10)

3 Gazala Square is also a convenient parking place near the seaside, and it can provide parking facilities for about 60 cars

Other free parking lots are sited along the Adrian Pelt, Baladia, Ibn Saud Streets, etc The parking of cars is allowed within these streets without charge This enables ~~the~~ businessmen and others to park their cars away from the commercial streets

In addition, there is a rent parking system for limited period of time This parking system was introduced by the Municipality of Tripoli on the major commercial streets It comprises 280 metres, installed along the right side of the parking streets Parking is limited for a maximum of two hours The rent parking system has solved, to some extent, the problem of parking, particularly within the major streets which are characterized by heavy traffic of both vehicles and pedestrians

All the existing parking places, whether they are free or with charge, are inadequate, especially during working hours This is due partly to the narrowness of the major streets and their poor planning, and partly to the increasing number of vehicles within the city Also, the virtual non-existence of off-street parking facilities which are commonly recognized as essential to the downtown areas is another contributory factor

Plate 5.10(A) Parking place at Tersana square near Bank of Libya

Plate 5.10(B) Tersana Square - Car park

to the congestion of the central area streets

5 4 ROAD ACCIDENTS

The increasing number of vehicles, together with the design of the street pattern, has contributed to the high rate of road accidents within the city and its metropolitan area Also, the lack of speed limits on vehicles is a contributory factor, particularly on the regional roads and highways of the city Other factors are also important contributors to the increase of road accidents, such as carelessness on the part of drivers and lack of understanding of traffic signals, as well as absence of law against drinking and driving

Table 5 2 Number of road accidents occurred in Tripoli between 1951-1965

Year	No of persons killed	No of persons injured	No of damaged vehicles
1951	35	396	508
1952	39	357	447
1953	29	481	753
1954	56	804	979
1955	38	909	1,114
1956	32	906	1,518
1957	37	943	1,310
1958	44	1,140	1,524
1959	27	1,002	1,662
1960	48	1,028	1,703
1961	47	1,029	1,368
1962	42	889	1,368
1963	56	1,065	1,910
1964	67	1,326	2,003
1965	68	1,770	1,393

Source Traffic Police, Department of the Western Region, Tripoli, 1966

This table reveals that the number of frequency of road accidents which resulted in deaths was extremely high between 1951 and 1965 The number of accidents has nearly doubled in the 15 years The frequency of road accidents which resulted in injuries to persons increased by four times, and damage to vehicles trebled

Most of these accidents which took place were caused by lorries and trucks This is explained partly by the fact of the narrowness of the roads (about six metres), together with lack of responsibility on the part of many lorry and truck drivers who cause the majority of road accidents Taxi-drivers are also responsible for many of the reported accidents These accidents usually occur on the Tripoli-Homs and Tripoli-Zawia highways, where some areas are locally called "death spots " Many of these accidents are caused by taxi drivers at high speeds on these highways regardless of the numerous dangerous bends

5 5 TRIPOLI PORT

The port and harbour are located to the north of the city at 32°54'N and 13°11'E (Plates 5 11 and 12) During the Italian rule, the port has been established in a natural bay which has been further protected to the north by the installation of a Spanish mole 2,000 metres in length, and to the east by Karamanli mole 825 metres long (Fig 5 8) Thus this gives the port a very considerable amount of sheltered water The principal activities of the port take place in the north-west section

Figure 5 8

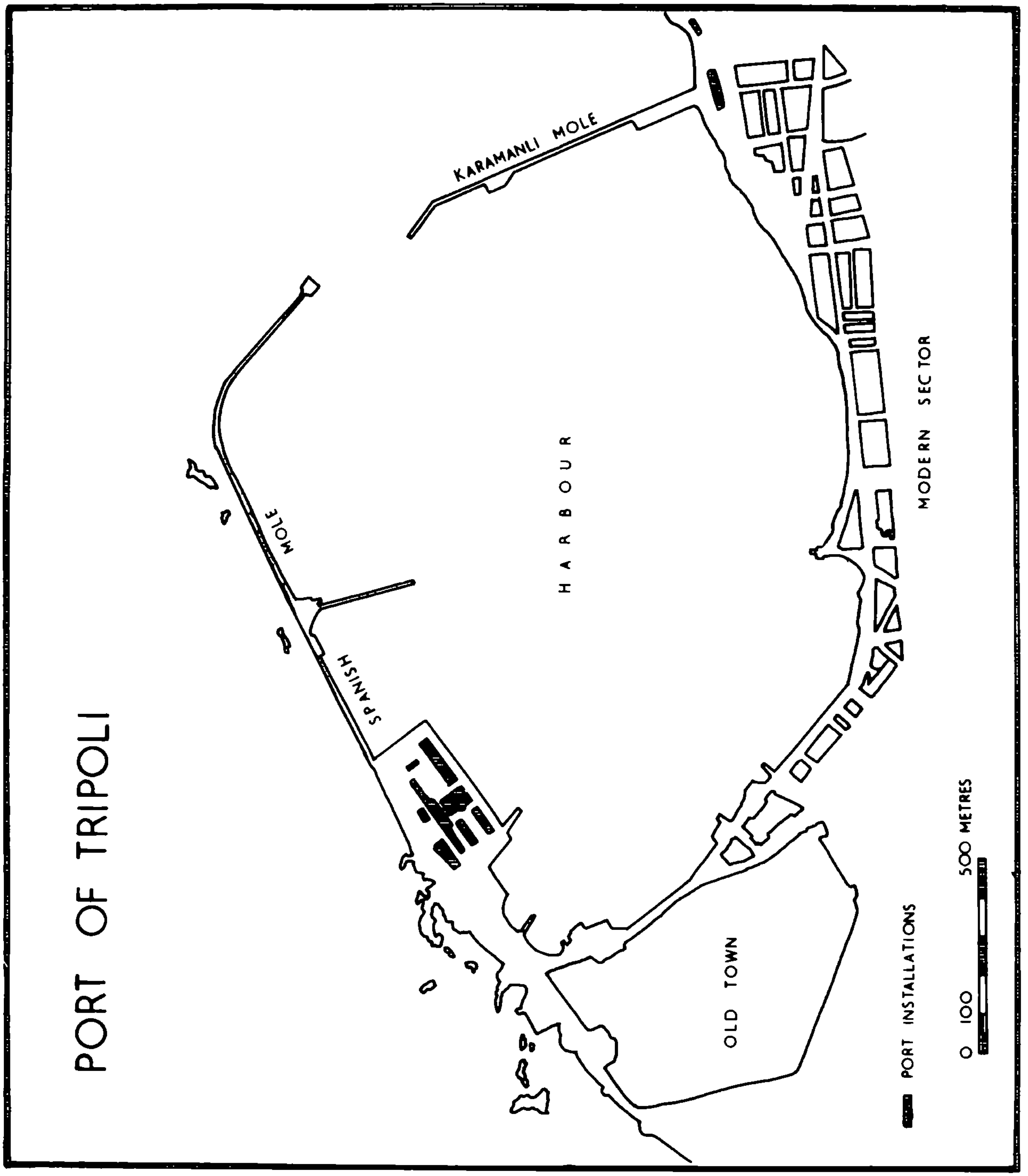

PORT OF TRIPOLI
KARAMANLI MOLE
SPANISH
MOLE
HARBOUR
MODERN SECTOR
OLD TOWN
PORT INSTALLATIONS
0 100 500 METRES

Plate 5.11 Tripoli port : Spanish mole

Plate 5.12 Tripoli port : Karamanli mole

The installations of the port consist of several docks

1 Bulk goods docks excluding silo goods

2 The silo dock is mainly allocated for the discharge of grain Cement is also stored in this area

3 The general cargo docks are mainly dominated by the import of general cargoes

4 The cold-storage goods dock is used only for this type of goods

5 The car ferry dock for unloading cars on the Karamanli mole

6 The passenger traffic dock is also situated within the Spanish mole There is no separate dock purely for passenger vessels (2)

Table 5 3 The mechanical and handling equipment of Tripoli port, 1966

Kind of mechanical and handling equipment	Number
Mobile cranes	21 (between $2\frac{1}{2}$ and 10 tons)
Floating crane	1 (60 tons)
Fork-lift trucks	2 of 6 tons
Lighters	8 of 100 tons each
Pontoons	4
Tractors	16
Trailers	30

Source Scandiaconsult International, Extension of Tripoli Harbour, Tripoli, 1966, p 2

The depth of the harbour quays varies from 8 fto to 28 ft 9 ins , so only vessels drawing less than 27'6" are allowed to enter the port The length and depth of the various quays and the area of sheds and open-air storage places are as follows

Table 5 4 Quays and Storage Spaces of the Port of Tripoli in 1965

Quays		Storage space in m^2	
Depth in ft	Length in ft	Covered	Open
8-10	931	16,046	17,742
16	222	-	-
15-23	1,085	8,625	4,300
22-26	2,430	-	-
24	350	-	-
25	460	-	-
29'9"	400	-	-
Total	5,878	24,671	22,042

Source Doxiadis Associates, Transportation in Libya, Athens, 1965, p 168

Thus, the total length of quays does not exceed 1,800 metres approximately The deeper part which comprises 140 metres is used exclusively for the unloading of petroleum products, whereas another 300 metres of a draft under 12 ft are unsuitable for the mooring of ships Of the remaining length, only about 1,000 metres have a depth of more than

22 ft and can be used by medium size vessels (3)

Also, the storage spaces are inadequate to cope with the increasing activities of the port About 5,000-7,000 tons of goods, for instance, can be stored in the existing storage spaces This capacity will be increased by 2-3,500 tons when the new extensions are completed However, even so, it will be inadequate for the present activities of the port This is primarily due to the fact that the open-storage spaces are used almost exclusively for cargoes of the oil companies, and there is practically no space left for facilitating the movement of other traffic Furthermore, both the mechanical equipment and the lighterage facilities of the port are totally insufficient for serving even its present needs

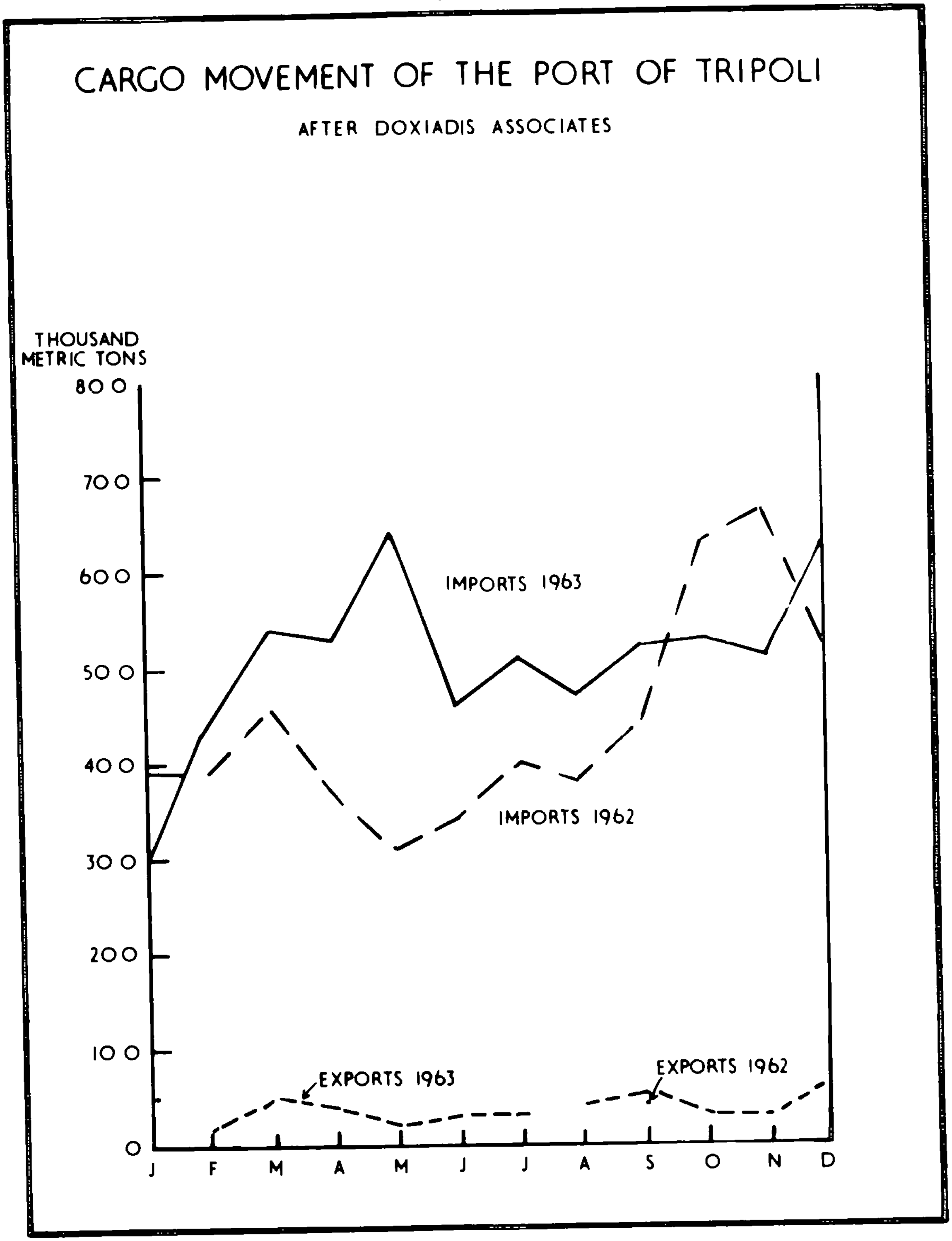
With the exception of 1962, no detailed information is available on the size and the type of ships using Tripoli harbour In 1962, the port was visited by 1,329 merchant ships from 26 different countries (Appendix II Table 1) Most of these ships were registered in Italian, British and German ports, but they were of a small size Vessels belonging to American shipowners had the largest net registered tonnage, followed by those of German, British and Italian vessels It is noted also that most of the vessels of the Mediterranean countries are generally of a size between 200 and 1,500 deadweight tons, and maximum length and beam of 75 and 12 metres respectively The draft can be estimated to amount to a maximum of 5 0 metres (4) Vessels of the Northern European countries which visit Tripoli port are of larger size with a deadweight capacity of 100-2,500 deadweight tons The length of these vessels is between 90-120 metres (5) American ships visiting Tripoli are bigger than European ones, and usually exceed 8,000 deadweight tons The length of these ships varies between 135-150 metres (6)

The tankers transporting refined petroleum products are also discharged in the port of Tripoli at the Karamanli mole The deadweight capacity of these tankers is 33,000 tons with a length of 220 metres and maximum draft when entering harbour of 9 0 metres (7)

The commercial cargoes which were unloaded through the port of Tripoli have increased in recent years This was partly due to the oil explorations in Libya and partly to the commercial and industrial activities For example, imports of commercial cargoes has risen from 558,757 tons in 1956 to 1,220,143 tons in 1965, of which 219,362 tons consisted of petroleum products and 952,146 tons of commercial goods (Appendix II Table 2) About one-third of the imported goods which were unloaded through the port consisted of building materials, other included foodstuffs, household articles, clothes, textiles, etc

The rate increase of commercial cargoes has amounted to 184 per cent between 1956-1965 This was mainly due to the rapid increase of imports, whereas the export cargoes declined through Tripoli port owing to the decrease of the

Figure 5 9



CARGO MOVEMENT OF THE PORT OF TRIPOLI
AFTER DOXIADIS ASSOCIATES
THOUSAND METRIC TONS
80 0
70 0
60 0
50 0
40 0
30 0
20 0
10 0
0
IMPORTS 1963
IMPORTS 1962
EXPORTS 1963
EXPORTS 1962
J
F
M
A
M
J
J
A
S
O
N
D

exported agricultural raw materials, such as esparto, barley, olive oil, groundnuts, etc

The annual revenue of the port has risen from about £L4 million in 1956 to £L 14 millions and £L 18 millions in 1965 and 1968 respectively

<u>Passenger traffic</u>

Figures for passenger movement are available only for 1963 amounting to 4,434 passengers departing and 3,984 arriving These figures rose considerably in the subsequent years due to large numbers of Moslem pilgrims going to Mecca It is estimated that these figures reached 14,000 in 1966

Apart from the pilgrim traffic, there is an Italian vessel working regularly between Tripoli and Naples In this instance most of the passengers are Italians who are visiting their homes in Italy

The port of Tripoli employs a considerable amount of dock labour There are 2,500 registered dock workers, of whom 75 are permanent and remunerated with weekly wages of £L4 8 0d per worker, and the rest are paid only when there is actual work It is noteworthy that the average daily requirements of the port come to about 600 workers

The above system of employing labour has important repercussions upon the quality of labour For example, the insecurity of employment acts as a repellant which drives all good and skilled workers away from the port They tend to follow steadier jobs, even if they are less well paid, and the only labour which remains available for the port operations are those unsuitable workers who cannot find regular jobs elsewhere Most of the port's workers are from the Shanty Town and other low income groups who have migrated to Tripoli in recent years

Conclusion

It can be seen that the traffic problems within the urban area of Tripoli are acute owing to several factors Firstly, the Italian master plan of the city did not take into account the future needs of the city Secondly, the local authorities failed to widen the major highways, streets and construct new roads and subways together with large intersections in order to cope with the increasing number of cars within the city Thirdly, the location of the Central Business District restricts all business and commercial activities to a few streets This, in fact, gives rise to congestion of cars and other means of traditional transport, especially in the transitional zone Fourthly, the frequency of road accidents reflects poor planning of streets and roads and absence of sufficient lighting along the roads Finally, Tripoli port still lacks adequate space for unloading goods and machinery, causing congestion of vessels in the harbour

REFERENCES

1 Whiting Associates Internation, Transportation Muhafadah of Tripoli and Mudiryah of Janjur, Tripoli, 1967, p 3-4

2 Scandiaconsult International, Extension of Tripoli Harbour, Tripoli, 1966, p 2

3 Doxiadis Associates, Transportation in Libya, Athens, 1965, p 178

4 Scandiaconsult International, op cit , p 11

5 Ibid, p 11

6 Ibid, p 10

7. Ibid, p 12

CHAPTER VI

HOUSING

Housing development is the most striking feature of the urban growth of Tripoli during the last fifteen years (1952-1966) Housing expansion has taken place in many directions, particularly in the west and south of Tripoli, where new residential areas have been created Although housing expansion has been vast, it has not kept pace with the high demand for houses, owing to the rapid increase in population of the city Consequently the Shanty Town emerged and old residential areas have degenerated into slums Rises in rents are also another housing problem, created by the shortage of housing stock to satisfy the market demand Government housing schemes have also been important in the residential development of the city All these factors will be examined in detail

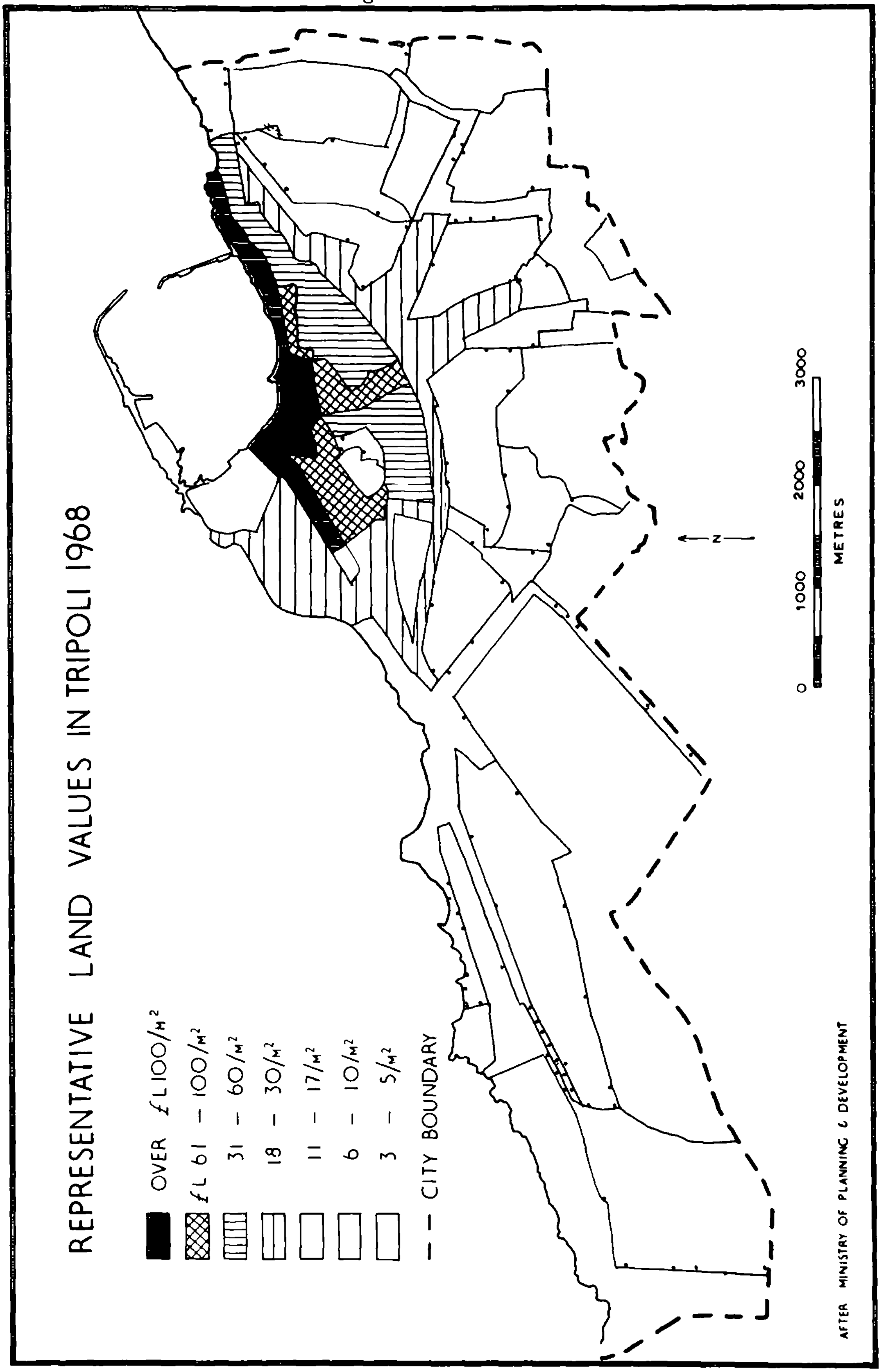
6 1 LAND VALUES AND LAND SPECULATION

In Libya in general and Tripoli in particular, the oil explorations of 1956, the oil discoveries of 1959, and the oil production which started in 1961, had a great impact not only on the economy of the country as a whole but also on the land values within urban centres Tripoli, being the largest city in Libya, has experienced since 1956 a great and continuous rise in land prices This drastic change in the land value is governed by two major factors geographic and economic

The geographical factor can be examined through the land use of the city Firstly, the highest land values are found within the core of the Central Business District Here the land price per square metre exceeds £L.100 (Fig 6 1). This intensity of land prices within the core of the CBD is due primarily to its commercial use which gives a good return to the investor The land may be developed by buildings with high storeys in which banks, offices and shops are accommodated Elsewhere within the CBD land prices are lower, about £L 51-100, 31-60 and 18-30 per square metre But land values are rising annually owing to the great demand for commercial sites The owners of old properties are being persuaded by the high prices of land to sell their properties in order to be developed for high storey buildings

Within the residential areas high prices are being experienced in the upper class and middle class residential zones of the Shara Ben Ashur, Garden City, Shara Mizran, Shara Belkhair and Shara el Garbi This, in fact, is related to the proximity and accessibility of these sectors to the CBD Here the land price is £L 18-30 per square metre It is highly important to private investors as it is suitable for high storey buildings and villas Medium land prices (£L 11-17 per square metre) are found in the western sectors of Tripoli (Giorgim-

Figure 6 1


REPRESENTATIVE LAND VALUES IN TRIPOLI 1968
OVER £L100/M²
£L 61 – 100/M²
31 – 60/M²
18 – 30/M²
11 – 17/M²
6 – 10/M²
3 – 5/M²
CITY BOUNDARY
N
0
1000
2000
3000
METRES
AFTER MINISTRY OF PLANNING & DEVELOPMENT

popoli and Gargaresh areas) Although these areas have a high standard of living, land prices are lower, due partly to the fact that each villa generally consists of one or two floors and occupies an average 500 square metres, and partly because the villa does not give a very high return in comparison with multi-storey flats In other words, the investor prefers to build high storey buildings which give him a higher monthly income

Land values within other residential areas of the Arab quarters vary between £L 11-17 and £L 6-10 per square metre, depending entirely on the site of the land and its accessibility to the main roads and bus services as well as on the existence of a shopping centre In other words, the well sited land is more expensive than the land which is situated away from the urban facilities Also the proximity to the CBD is of considerable importance in the evaluation of the site This can be noted in the land prices of both Shara Ben Ashur and Shara el Kebir quarters Here the prices in 1966 have reached £L 17 per square metre On the other hand, land prices are cheaper in the Zawiet el Dahmani and El Nuflein quarters This is related to the existence of the agricultural lands and absence of social and economic services Therefore the land is not desirable for urban development on the part of both investors and private builders.

The lowest prices on the land market are found within the low class residential areas of the Gott el Shaal (to the west of

Tripoli) and Ras Hassan (to the south-east) Here the land is less desirable to middle class people owing to a variety of reasons, absence of public utilities (piped water and sewers) and lack of bus services, as well as absence of other community facilities and recreation not to mention the prevalence of unpaved roads Therefore the land is only demanded by the poorer people who want to build their own dwellings on cheaper land Land prices range between £L 6-10 and 3-5 per square metre

The industrial use of land can also determine prices For example, the sites near to the CBD are more expensive owing to the great demand for land to be developed either for commercial or residential use Land prices are being evaluated for any particular development on the basis whether it is for residential or commercial uses On the other hand, the remote site on the periphery of the city is cheaper The land price per square metre is between £L 3-5 Therefore a high proportion of industrial firms tend to move to the remote sites where the availability of open spaces makes it possible to provide the firm with an adequate area for its industrial activity

Economic factors are also of great importance in raising the land prices within Tripoli The increasing demand on the land for urban development accelerated land prices It was associated primarily with the inflow of foreign capital as well as oil company and Libyan Government expenditures Investors therefore found that the most profitable business was construction of high storey buildings and villas Thus the land market constituted the most important sector in the economy of the investors On the other hand, the brokers, who number 54 with their agencies, played another significant role in the evaluation of land prices They contributed to the sharp rise of land prices, particularly if the site had a commercial use

With the rise of the standard of living in terms of market prices and high rents, land speculation started to emerge in Tripoli Arabs, Jews and Italians all participated in land speculation activities and contributed to the sharp rise in land prices This was associated with the inflation which hit the Libyan economy and affected the whole standard of living in Tripoli The Economic Research Department stated "Speculation in land and inventories is usually associated with inflation Landlords rush to buy land not to develop it but to hold it idle for a future time when its value rises Rising speculation means freezing capital and land in unproductive activities Dealers, as well as landlords, hold on to their merchandise and consequently accelerate the inflationary pressure "(1)

This kind of land market is still being exploited by Arabs, Jews and Italians in Tripoli Speculators purchase any particular site whether it is cultivated area or virgin land They keep it idle for several years, waiting for a rise in land values Then they sell the land at a high and very profitable price, because the land prices can be multiplied several times within this period of time This has, in fact, resulted in a great decline in the best Arab and Italian farms within the city limit (Plate 6 1)

Moreover, any decision on the part of the local authority to develop any particular land for public development could raise the prices of land and give the opportunity to speculators to seize the land around or near the chosen site For example, when the Municipality of Tripoli decided in 1961 to transfer the wholesale market of the "Suk el Tulatah" from its old place to a new chosen site in Gurgi area (to the east of the Wadi Mejenin), the speculators bought all the cultivated lands and wastelands surrounding the new site of the market at 10s per square metre As soon as the construction work of the new market began, the land prices went up considerably When the construction work was being completed in 1965, the price of land experienced a very great rise, and at the present time, the price for each square metre is £L 11-17 This example illustrates clearly the impact of speculation on land prices Other examples could be mentioned in this respect for other sectors of the city in which land prices went up considerably within several years

When the Ministry of Agriculture made new regulations prohibiting the transfer of agricultural land within Tripoli to urban use, the speculators who had bought these lands committed destructive acts against agriculture They began their operations by neglecting cultivation Then they cut

Plate 6.1 Farming areas within the middle zone which are now subject to land speculation

down the trees, and used destructive chemical materials to kill the plants in a short period As a result, the land became arid and neglected Then the speculators left the land abandoned for several years waiting for land prices to rise, when they can sell it at a profitable price

These illegal methods were being used on agricultural land in several parts of Tripoli such as in the Sidi Mesri, Gurgi and Shara Ben Ashur They resulted in a great diminution of good farms and gardens to be developed for urban use Unfortunately, the local authority, although aware of these dangerous methods, has taken no serious action to prevent the speculators from committing further damage against the economy of these farms Some people suspect that the silence of the local authority was due to some kind of secret co-operation between the speculators and some officials Consequently, owing to speculative activities, land values within Tripoli city are still subject to instability of land market

6 2 CONSTRUCTION OF HOUSES

The boom of the building activities in Tripoli started as early as 1951, when Libya became independent It increased considerably after oil exploration in Libya in 1956 The number of the dwellings erected in the city between 1952-1966 was 8,812 (3,414 local houses, 3,151 villas and 2,247 flats)

Table 6 1 House Constiuction in Tripoli, 1952-66

Year	No of houses completed
1952	74
1953	299
1954	200
1955	366
1956	521
1957	575
1958	600
1959	495
1960	404
1961	602
1962	1,093
1963	1,642
1964	694
1965	565
1966	682
Total	8,812

Source Technical Office, Municipality of Tripoli, 1965

In 1966, the number of the firms in the building industry was 57 and the number of contractors was 132, of whom 32 are Italians and the rest are Libyans

Almost all the local Libyan houses were built by their own developers with a special supervision of either Libyan or Italian surveyors The Libyan traditional house consists only of one storey The construction work does not require very highly skilled professional builders and the house can be erected by the owner himself with the assistance of two other workers Also the construction work does not necessitate concrete, cement or steel (Plate 6 2) This simplicity of building encouraged many people, particularly among the low income groups, to take part in building operations Before 1962, construction work was mostly being undertaken by the private developers themselves without legal permission of the Tripoli Municipality, which was ignored For example, most of the new traditional dwellings which were built within the Ras Hassan (Shara Ben Ashur quarter) and the Ghott el Shaal (to the west of the Gargaresh quarter), were legally unauthorised This was primarily due to the objections of the Tripoli Municipality and its insistence that these dwellings should not be built in these areas without provision of proper planning and a sewerage system

New regulations laid down by the 'Council of the Tripoli Municipality' in 1962, prohibited any kind of building without approval and supervision of the Technical Office The reason for this was to ensure the safety of the new dwellings from collapse

The construction work of villas and flats were mostly undertaken by Italian contractors and sub-contractors under supervision of building firms This is explained partly by the fact that the building operation requires highly skilled workers and partly that the high storeys in particular cannot be built by one small firm or by private developers

Plate 6.2 Construction of traditional houses in Gurgi

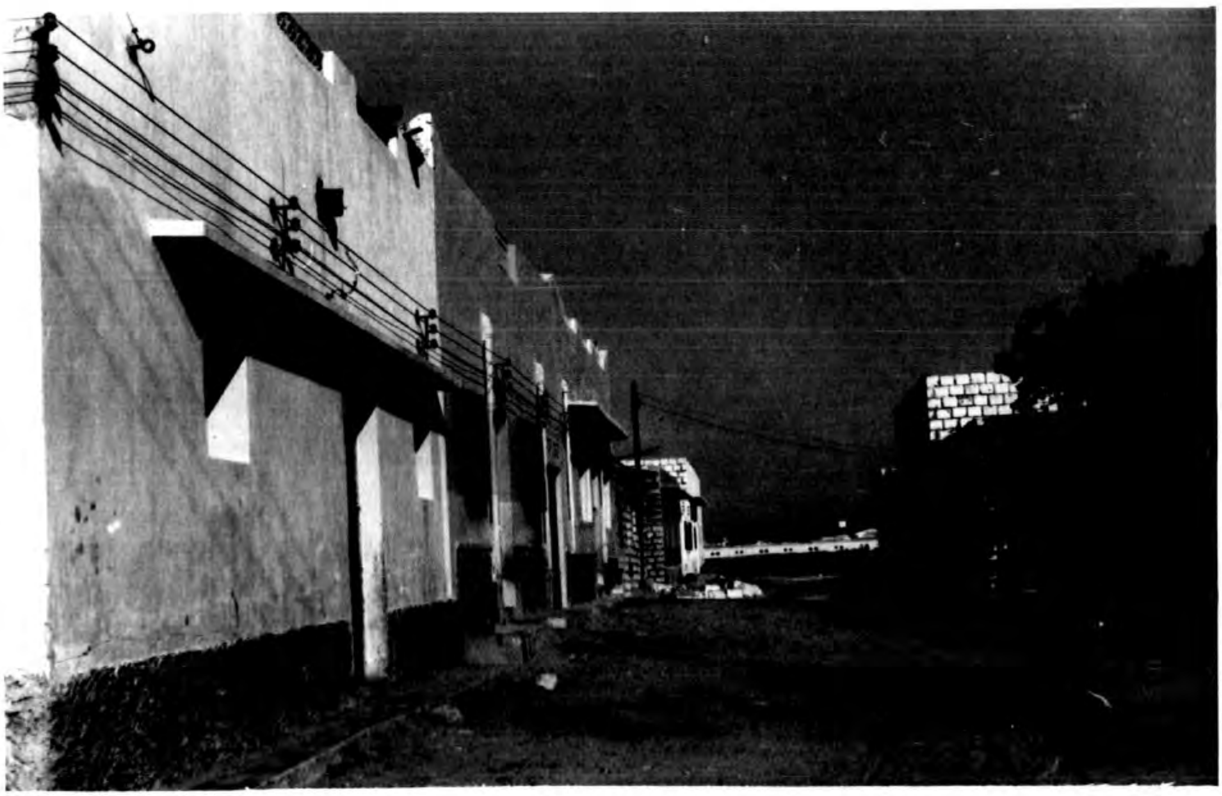


Plate 6.3 New traditional houses in Gurgi

In 1964, the total number of persons engaged in building activities was 7,593 of whom 244 persons were working operators and the remaining 7,369 were employees Only about 12 per cent of the employees were reported to be working in occupations which could be placed in the category of 'other than operatives' and all the remainder, viz 6,493 were operatives (2)

6 3 BUILDING MATERIALS

Most of the building materials used in construction activities in Tripoli have been derived from the limestone rocks exposed to the west of the city in the Gargaresh quarter, but unfortunately the extensive quarrying has exhausted the limestone rocks and damaged the landscape of the area Therefore in 1962, Tripoli Municipality prevented the mining firms from continuing quarrying in the area so that the land might be used for housing development As a result of these municipality regulations, the limestone quarry firms moved to another area at Mayah (30 kilometres west of Tripoli) Limestone blocks are now being quarried extensively in this area using advanced mechanical means The blocks are standardized, and are being produced in two sizes 40 x 20 x 25 cm and 40 x 20 x 20 cm The firms have to transport the required number of the limestone blocks to the site, where the construction is taking place within the city limit The firm charges four Libyan piastres (10d) for each limestone block, if the construction work is taking place within the city limit, but it charges more if the construction work is taking place outside of Tripoli limit

The number of limestone blocks required for the construction varies from one type of dwelling to another For example, the traditional Libyan house required between 3,500-4,000 blocks, depending on the area and number of rooms and other housing facilities The construction of a villa requires between 4,000-5,000 blocks, it may exceed this number if the villa is large A flat does not contain more than 5,000 limestone blocks on average

At the present time, the Mayah quarrying area can supply Tripoli with all its needs of limestone blocks for construction Not only is Mayah limestone in great demand in Tripoli, but it is also used for building in other parts of Tripolitania

Lime is also used in all types of dwellings It is produced in the Azizia area by specialized industrial firms, but production cannot satisfy the requirements of the Tripoli market Therefore the local authority allows the import of lime from Italy, which is of better quality than the Azizia lime

Although gypsum is an excellent building material, it was used very little for the construction of the traditional Libyan dwellings and villas This is related to the fact that the price of gypsum is more than that of limestone blocks Therefore the sole use of gypsum was for the construction of high multi-storey buildings It is interesting to note that the gypsum raw material is locally produced and shaped for various construction purposes, such as roofs, walls, etc These operations with gypsum raw material are now taking place at the Government factory to the west of Tripoli, on the Suani Road The gypsum factory can produce sufficient construction material to supply all market needs in Tripoli

Hollow concrete blocks are manufactured by four specialized factories They are standardized by different sizes 40 x 20 x 20 cm These different sizes can be produced according to the requirements and technical descriptions of both surveyors and contractors

Structural tiles are being used for construction of roofs They are manufactured in Tripoli by Italian and Libyan building firms, but production is not adequate, and so foreign structural tiles are imported

Travetti beams for roof construction are being used now extensively in all buildings whether they are traditional or modern The beams consist of hollow precast elements being made of clay and joined together with steel bars and cement

Other building materials such as cement, glass, ceramic tiles, electricals, plumbing and sanitary ware, timber, asphalt and tar, are all imported

It is estimated that about 14 5 per cent of the dwellings of Tripoli are being built of concrete, and comprising all the multi-storey buildings within the central part of the city, whereas 61 9 per cent of Tripoli dwellings are constructed of limestone blocks (traditional Libyan houses) Mud dwellings form only 2 0 per cent and they are found mainly within the Arab gardens in the eastern part of the city The hut dwellings of the Shanty Town, which comprise 21 6 per cent, are mostly built of tin and wood

6 4 CONSTRUCTION COST

The construction cost varies from one type of dwelling to another, depending generally on the building materials used, the design of the house, and the type of labour A dwelling built of stone with lime and concrete roofs or travetti costs about £L 300 per room for a low income house, £L 400-500 per room for a middle class house and £L 600-800 per room for luxury flats and villas

In terms of cost per unit floor area, the following table shows the average cost per square metre

Table 6 2 Cost per unit floor area in Tripoli, 1967

Type of dwelling	Cost per sq metre in £L
Flats	50
Villas	30
Traditional Houses (middle income group)	20
Traditional Houses (low income group)	15
Huts (Shanty Town)	5

Source Field Work Study, Tripoli, 1966-67

This table indicates only the estimated cost and does not include the cost of the developed land which, in fact, varies from one area to another

6 5 BUILDING SOCIETIES AND THE LIBYAN INDUSTRIAL AND REAL ESTATE BANK

In 1956, the Libyan Government issued a law which recognized the value of building societies and also contained regulations under which building societies may be chartered The Government aimed to encourage such societies to take an effective role in building activities particularly dwellings of low income groups who could not afford to build new houses without external financial help

In 1961, the first Libyan building society was established by a group of young intellectual people who were interested in helping each other as well as in attempting to solve their accommodation problems More than one hundred members have joined the society and contributed in creating a capital which amounted to £L 20,000 Unfortunately, the building society could not get any subsidy from the Government in order to start work Therefore the Society was dissolved in 1962, without managing to implement any useful work for its members

However, in September 1965, King Idris I issued a Royal Decree, announcing the establishment of the Libyan Industrial and Real Estate Bank The initial capital of this bank was £L 2 millions, which was increased to £L 10 millions in 1966 Half of the bank capital is to be invested in real estate and the other half is being allocated to industrial loans The real estate loans may be granted on -

1 Short and medium term for duration not exceeding 7 years
   (a) extension, or rehabilitation of an existing building
   (b) erection or purchase of dwelling houses for the purpose of renting or selling the premises
2 Long term for a duration not exceeding 15 years for the purpose of erection of a dwelling house, for his own habitation if the borrower already possesses a dwelling or had property somewhere in Libya
3 Long term for duration not exceeding 20 years for the purpose of erection of a dwelling house, for his own habitation and when it is proved that the borrower is not a property owner

In all cases the rate of interest shall neither be less than 1% nor exceed 3% *(3)

The long term loans are more interesting and significant for housing development in Tripoli The bank has granted in one year period (1965-1966) 651 loans for building new houses amounting to £L 2,742,570 Most of these loans were granted to low income groups and the remainder were lent to the redevelopment of old properties This in fact indicates clearly that the bank has achieved in one year more success than other Government housing development

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*This rate of interest remained in effect until it was abolished by a Royal Decree in 1968

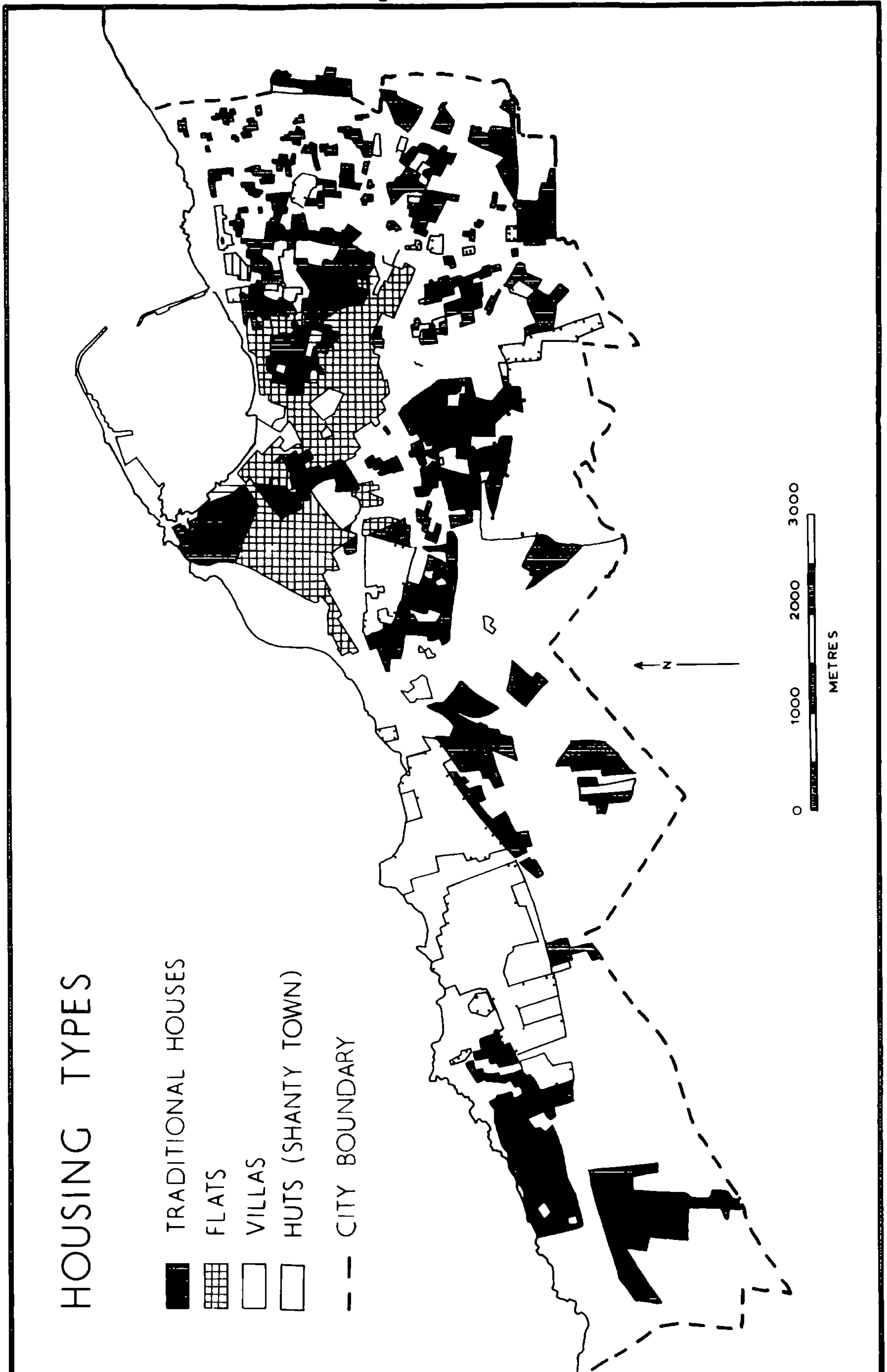
The creation of the mortgage system in Libya in general and Tripoli in particular will increase house-building activities within the city limit Also it will encourage the limited income groups to build their own houses As a result, it could ease the housing shortage and lower rent prices within the residential areas of Tripoli

6 6 HOUSING DESIGN

Tripoli has two major styles of housing, the traditional and the European This duality is explained by the influence of Turkish architecture on the pure Libyan design, and by the impact of Italian colonization which produced a new modern type of dwelling Other types of primitive dwellings were primarily created by the rural dwellers who migrated to Tripoli and settled down within the Shanty Town (Fig 6 2) Traditional houses fall into two types which may be examined Turkish and Arab The Turkish houses built during the eighteenth and nineteenth centuries are mainly concentrated within the Old Town Others situated outside of the Old Town, were mainly built at the end of the nineteenth century and before the Italian occupation in 1911 These Turkish houses, in general, consist of two storeys with a court-yard within the central part of the house They are well designed and extensively decorated A general account has been given of these houses in Chapter II

The Arab traditional dwelling is similar to the previous one with the exception of two characteristics, it is only of

Figure 6.2


HOUSING TYPES
TRADITIONAL HOUSES
FLATS
VILLAS
HUTS (SHANTY TOWN)
CITY BOUNDARY
N
0
1000
2000
3000
METRES

one storey, and has no extensive decoration within the house In other words, the second type is more influenced by the Arab simplicity of architectural style Other characteristics are the same, namely the existence of several long rooms, and the court-yard with housing facilities Windows are designed to open inside the court-yard, to give privacy and freedom of movement for women (Fig 6 3)

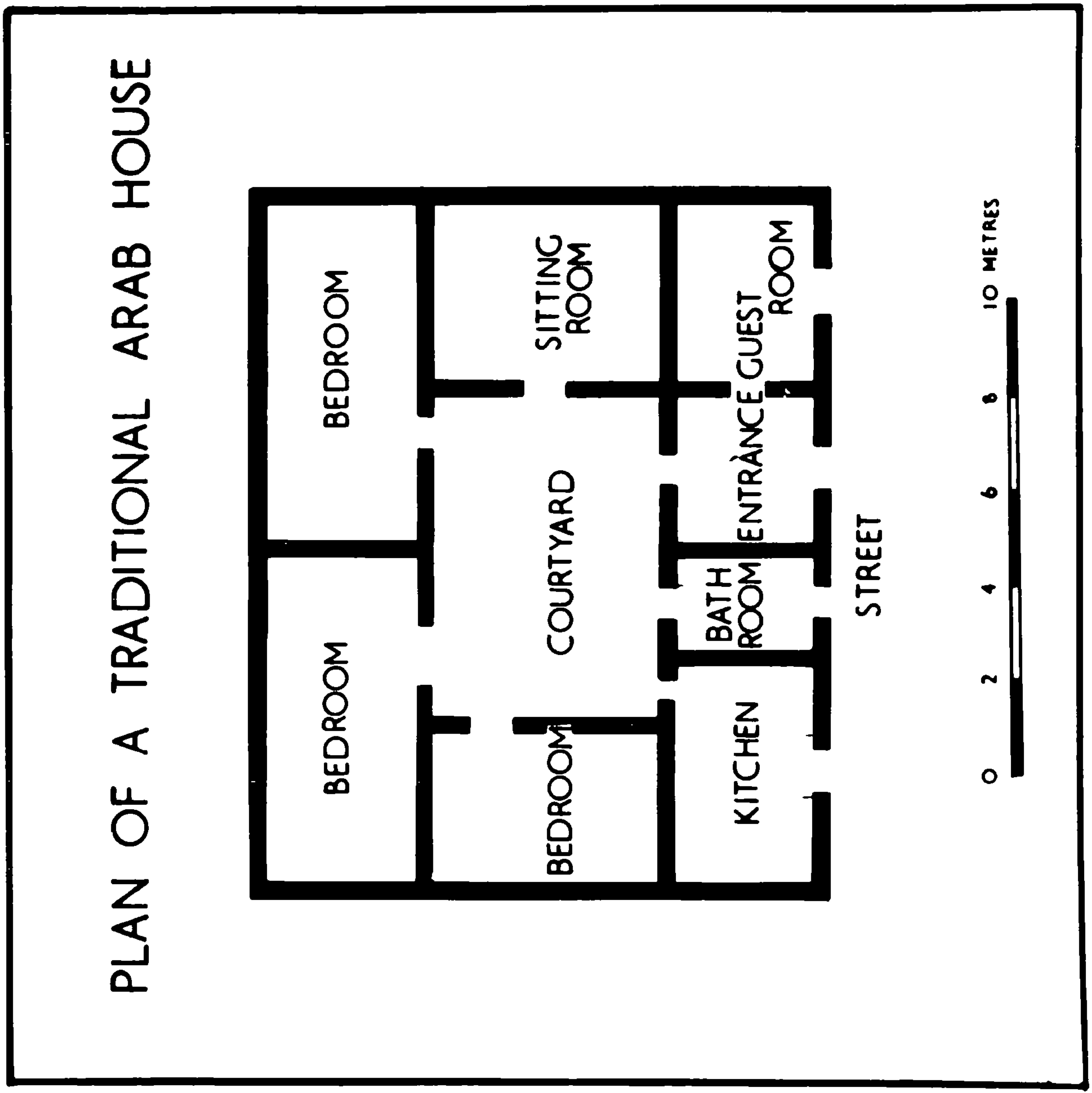
Traditional houses number 28,263 or 61 9 per cent of the total They can be divided in terms of age structure into three types -

1 Very old houses built during the Turkish rule, numbering 4,000
2 Houses built during the Italian rule, numbering 16,150
3 New houses built between 1952-1966, numbering 8,112

Almost all the Turkish houses are found within the Arab residential quarters with a special concentration in the Old Town (2,492 dwellings) The remainder are scattered in other quarters (1,508 dwellings) It is interesting to note that the Central Business District and the high residential areas do not have Libyan traditional dwellings, because of the restrictions imposed by the Ex-Italian Government, preventing Libyans from building traditional houses within the modern sectors These restrictions are still being implemented by the Municipality of Tripoli

The traditional houses, whether they are old or new, are terraced and back to back house dwellings, leaving no provision

Figure 6 3


PLAN OF A TRADITIONAL ARAB HOUSE
BEDROOM
SITTING ROOM
GUEST ROOM
BEDROOM
COURTYARD
ENTRANCE
BATH ROOM
BEDROOM
KITCHEN
STREET
0
2
4
6
8
10 METRES

for wide avenues and public spaces They are still lacking modern design, layout and architecture, and still maintain the same mediaeval housing design, which has much popularity among the middle and low income groups (Plate 6 3)

Modern dwellings number 6,637 representing 14 5 per cent of the total number of Tripoli dwellings They include two types of modern building designs flats and villas Flats are found in all high multi-storey buildings, occupying the whole central part of Tripoli Most of these flats were built during the Italian occupation within the period between 1922-1939 The remaining flats were erected between 1952-1966 These flats are generally well designed and based entirely on Italian architecture They numbered 3,640 in 1966 Almost all of these flats are occupied by the Italian, Jewish and other alien families

Villas are in three major areas -

(a) The Giorgimpopoli-Gargaresh zone, which is the largest villa estate, six kilometres long and about two kilometres wide All the existing villas were built between 1952-1966

(b) The Shara Ben Ashur zone is smaller in area (1 kilometre x ½ kilometre)

(c) The Garden City is much smaller in area and has fewer villas It is situated to the north of Shara Ben Ashur, and most of the villas were built between 1933-1939 (Plate 6 4)

The total number of villas is 2,997 Although their number is fewer than the flats, they occupy a more extensive

Plate 6.4 Southern part of the central business district and a part of the Garden City near the Royal Palace "Kasr el Khold el Amer.

residential area On the whole, villas are well designed, each one occupying 500 square metres in average, with garage and surrounding garden (Plates 6 5 and 6)

Hut type dwellings have no particular design, because they are constructed of any available material which gives the dweller at least partial protection e g corrugated iron, petrol drums, tin sheets, wooden boxes, slates, etc There is a tendency now on the part of new hut dwellers to construct their huts of tin sheets which can give much protection against strong winds and torrential rainfall Other old hut dwellers, being poor, cannot afford to buy more expensive material for hut construction Therefore they constructed their huts of cheaper materials such as petrol drums and wood boxes (Plate 6 8)

On the whole, the hut type dwellings of the Shanty Town are crudely shaped and are jumbled together As a result, there is no street pattern, and huts are very congested

The majority of these huts are sited in the Bab Accara area (Accara Gate) The rest are located in the Bab Ben Gashir area (Ben Gashir Gate) and Bab el Azizia All these huts are confined to the south of the built-up areas of Tripoli Although the official figure is 9,865 huts, representing 21 6 per cent of the total number of dwellings in Tripoli, their actual number is probably higher About 500 other hut dwellings are found in areas such as Gurgi, Jamaa Ben Nabi and Zawiet el Dahmani

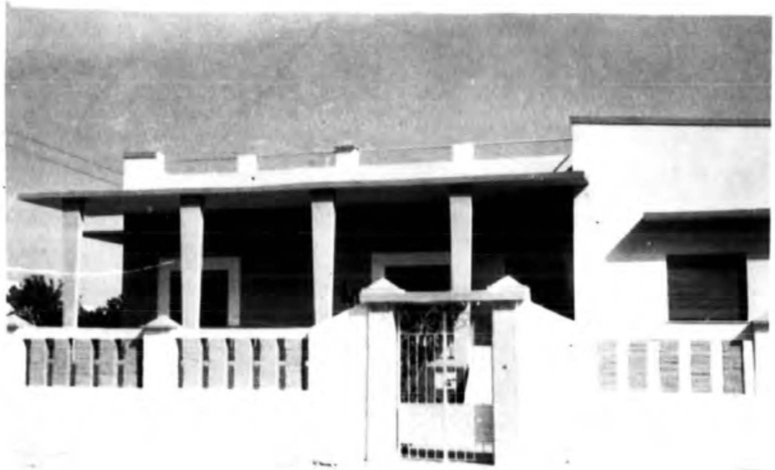


Plate 6.5 A New villa in Gargaresh

Plate 6.5(B) Upper class residential area in Gargaresh

Plate 6.6 Upper class residential area in Ben Ashur quarter.

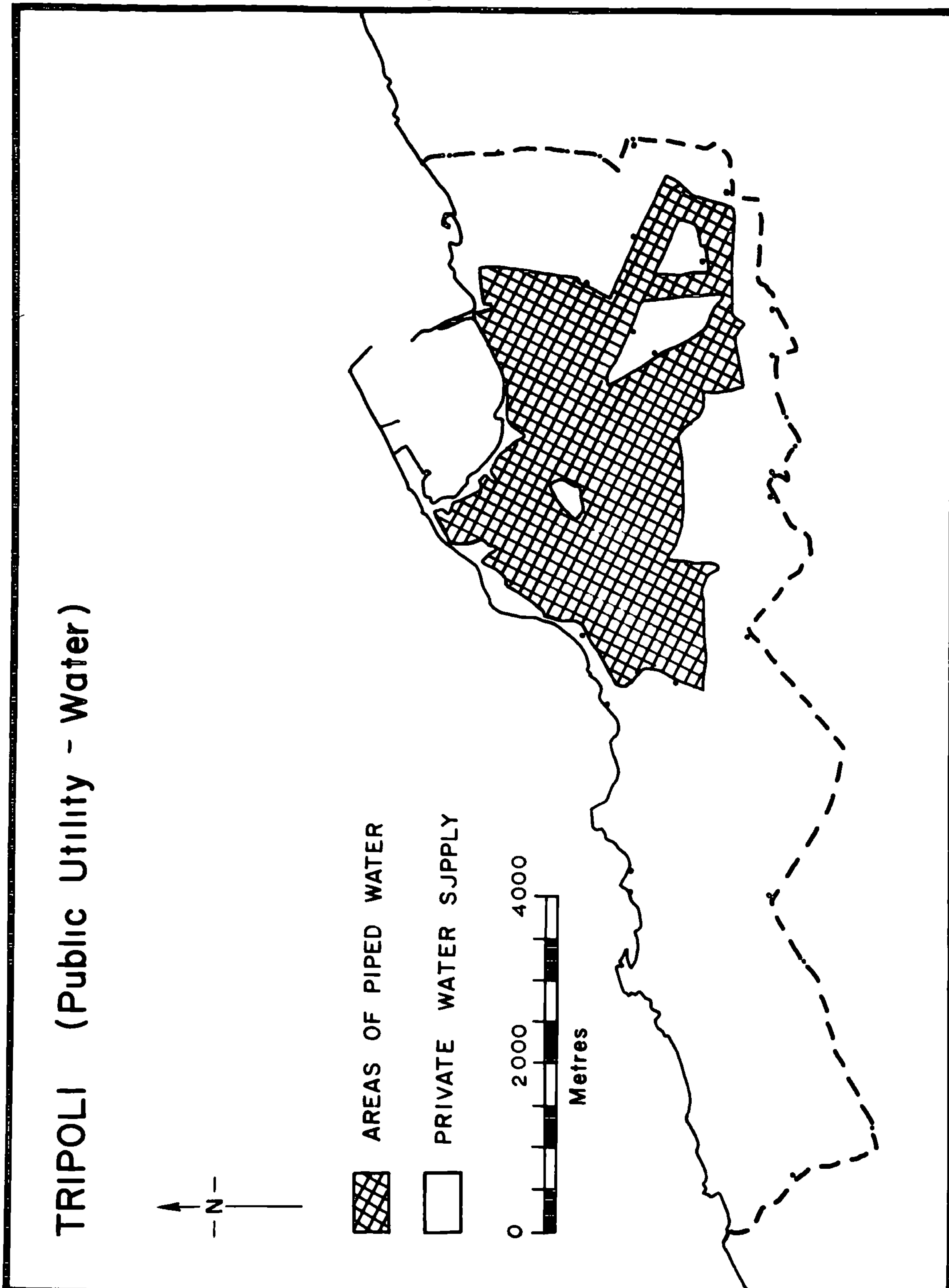
Tents and caves are small in number (177 tents and 8 caves) and are found mainly in the eastern part of Tripoli within the Arab gardens

6 7 PUBLIC UTILITIES

In all Libyan towns, and in Tripoli in particular, the public utilities are of great importance to any urban development In Europe and America, such public utilities are taken for granted, but in Libya they must be considered in detail before the local authorities make any plan for housing development Although Tripoli is the largest town in Libya, it is still lacking many essential public utilities Figure 6 4 reveals that there are ten quarters having piped water service, in the Old Town, CBD and other residential areas, which had this municipality service since the Italian rule Five other quarters have partial piped water service, introduced by the Municipality of Tripoli in 1961 Thus the water service includes the new residential areas of the Shara Ben Ashur, Zawiet el Dahmani and Shara el Shatt quarters, but the Arab houses within these quarters have no such facilities

The high-class residential areas of Gargaresh and Giorgimpopoli have a completely private system, supplying all villas with fresh water This system has been introduced since 1956 by the former Italian landlords of the developed land, who provided water services within the area The aim was to encourage the private developers to build new villas The private system comprises several artesian wells together with

Figure 6 4


TRIPOLI (Public Utility - Water)
N
AREAS OF PIPED WATER
PRIVATE WATER SJPPLY
0
2000
4000
Metres

large reservoirs, and the water is being pumped to the villas. This independent water system covers all the residential areas lacking the municipally piped water

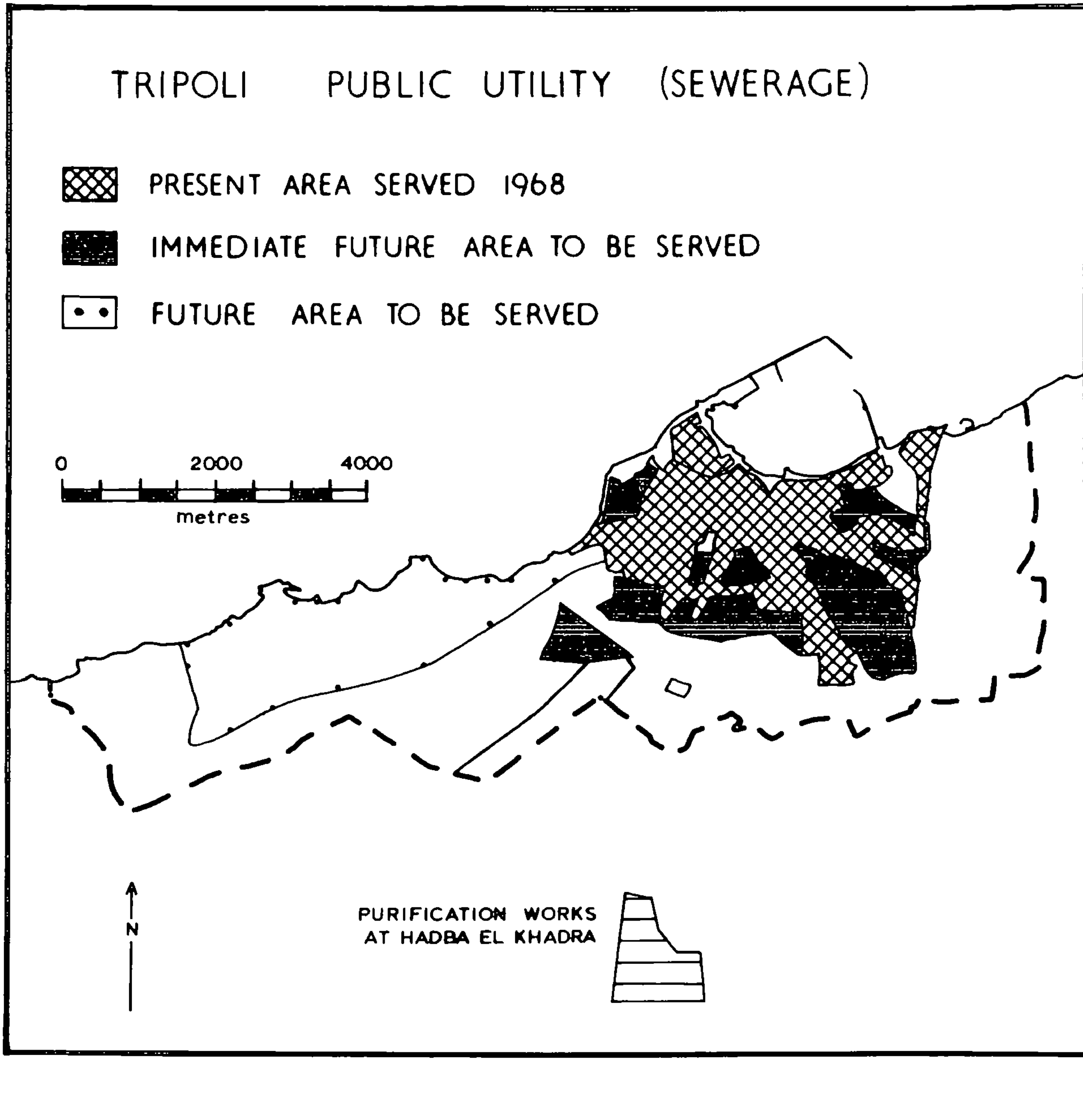
The remaining two quarters have no piped water facilities within their residential areas El Nuflein quarter, to the east of Tripoli, is the least populated quarter and is still dominated by the rural activities Almost all the dwellers in the quarter use their own garden or house wells for their water requirements The other quarter is the Shanty Town with its population of 25,061 This residential area of low income groups has no piped water service within the 9,865 huts, though it is the nearest quarter to the main water Pumping Station of Tripoli Municipality The inhabitants get their home needs of water from the four public taps fixed at the central part of the Shanty Town

Generally speaking, Tripoli still lacks piped water facilities within some residential areas Although the number of the Tripoli dwellings is 45,641, the number of water meters issued by the Municipality is only 22,000 representing 42 8 per cent of the absolute number of dwellings in 1967 As a result, the dwellers of over 23,000 houses either use their own wells and cisterns or use the 200 public taps found mostly in the Old Town and slum areas of Tripoli The existence of such public water taps within the Arab quarters reflects the low standard of living, because the dwellers cannot afford to introduce piped water in their houses On the other hand, there are no compulsory housing regulations in connection with such facilities, a factor that has encouraged the landlords of the old properties as well as the poor owner-occupies to neglect introducing such important housing facilities in their dwellings

The sewerage and surface water within the urban zone of Tripoli covers only 572 2 hectares or 16 6 per cent of the total area of the city Only seven of the nineteen quarters have public sewer system, and they comprise the Old Town, CBD and other high multi-storey buildings as well as some other Arab quarters (Fig 6 5) The provision of the existing sewers was accomplished by the Italians Nine other quarters have partial sewers They include the new built-up areas which are inhabited by alien people In the areas not served by sewers, Arab dwellers have constructed their own private system of cess-pits Other used water is mainly drained outside of the house This causes smell and the streets become convenient environments for flies

In addition, there are also two quarters with private sewerage systems They are Giorgimpopoli-Gargaresh area and El Nuflein quarter Although the former is a high-class residential area, it is provided with special sewers which only serve the area and has no connection with the Municipality sewers The latter is completely lacking in such public facilities Therefore, the dwellers use their own primitive means As far as the Shanty Town is concerned, it is provided with communal lavatories for both men and women Other used water

Figure 6 5


TRIPOLI PUBLIC UTILITY (SEWERAGE)
PRESENT AREA SERVED 1968
IMMEDIATE FUTURE AREA TO BE SERVED
FUTURE AREA TO BE SERVED
0
2000
4000
metres
N
PURIFICATION WORKS
AT HADBA EL KHADRA

is mainly thrown outside of the hut

It may be concluded that the absence of complete piped water service can be mainly attributed to the negligence of Tripoli Municipality rather than to shortage of water supply Moreover, the absence of a sewerage system covering the whole urban areas can be explained partly by the rapid housing development, and partly by the lack of planning organization and money The Ministry of Public Works is now undertaking a sewerage surface water drainage project within Tripoli Work on the project has started in 1964, and has not yet been completed The project will cost the Ministry £L 5,950,000

6 8 HOUSEHOLDS

A study of the households of Tripoli during the period 1954-1964 shows a trend towards separate dwellings for each household In 1954, the number of households was 30,723, whereas the number of dwellings was only 28,853 (4) Therefore the ratio of households to dwellings was 1 06 1 In 1964, the number of households was 46,046, whereas the number of dwellings was 45,641 (5) That is a ratio of 1 01 1 This reflects certain demographic trends as well as the degree of the urban growth and its relationship to the number of dwellings

The Census Reports of population of Libya of 1954 and 1964 distinguish between private households and institutional households, but they did not differentiate between the types of private households, the primary family unit (P F U) and composite household Also the census give no information on the structure of households Therefore the only available information is obtained from the sample Family Survey in Tripoli, 1962 (6)

Table 6 3 Structure of Households, Tripoli, 1962

Main structure of household	Percentage
Husband + wife	6 9%
Husband + wife + unmarried children	56 6%
Husband + wife + one married son or daughter	8 0%
Husband + wife + two or more married sons or daughters	0 3%
	71 8%
One parent household (widowed and divorced) + unmarried children	6 6%
One parent household + unmarried children + one married son or daughter	17 4%
One parent household + unmarried children + two or more married sons or daughters	0 7%
	24 7%
Brothers or sisters living together	
Where only one of whom is married	2 5%
Where two or more are married	1 0%
	3 5%
Total	100 0%

The largest percentage of households (63 5) therefore contains the primary family This high percentage of the total households is due to a variety of reasons Firstly, migration of primary families from the rural areas and Tunisia into Tripoli increased in recent years (1954-1962), a factor which raised the primary family households in the city. Secondly, the rising standard of living encouraged young people to live in separate dwellings away from their parents houses. Thirdly, disinclination of parents to support economically their married children. Fourthly, desire of young intellectual people to be independent.

Joint family households represent 18.1 per cent, the extended families 11.8 per cent and denuded families* only 6.6 per cent. The unusual form of household represented by the extended and joint family types is primarily due to traditional and economic factors which force the whole family to live in one dwelling. This is a particularly dominant social feature among the immigrants who tend to maintain their family ties.

Lack of detailed information on the size of household hampers any further analysis, the only available information being derived from the "Budget Family Survey of Tripoli Town, 1962." The data obtained was based entirely on a sample survey (7).

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*Households consisting of men and women living on their own, widows with young children and households which are neither conjugal, extended or joint.

Table 6 4 Classification of Households according to size in Tripoli, 1962

Number of persons in household	Household	
	Number	Percentage
2	19	6 6
3	32	11 1
4	56	19,5
5	51	17 7
6	57	19 8
7	39	13 5
8	18	6 2
9	4	1 4
10	8	2 8
11-12	4	1 4
Total	288	100 0

Source Dajani, W S , Family Budget Survey in Tripoli Town, Tripoli, 1962, p 79

It is interesting to note that the most common size of household has 6 persons, although households of 4 and 5 are also frequent It was calculated by S Dajani that the average size of household in Tripoli was 5 3, but the Ministry of Planning and Development gave a figure of 4 6 for the average size of household in Tripoli in 1964 (8) The decline of the size of household was primarily due to the spread of education as well as to rising standards of living particularly among the young married couples (Fig 6 6)

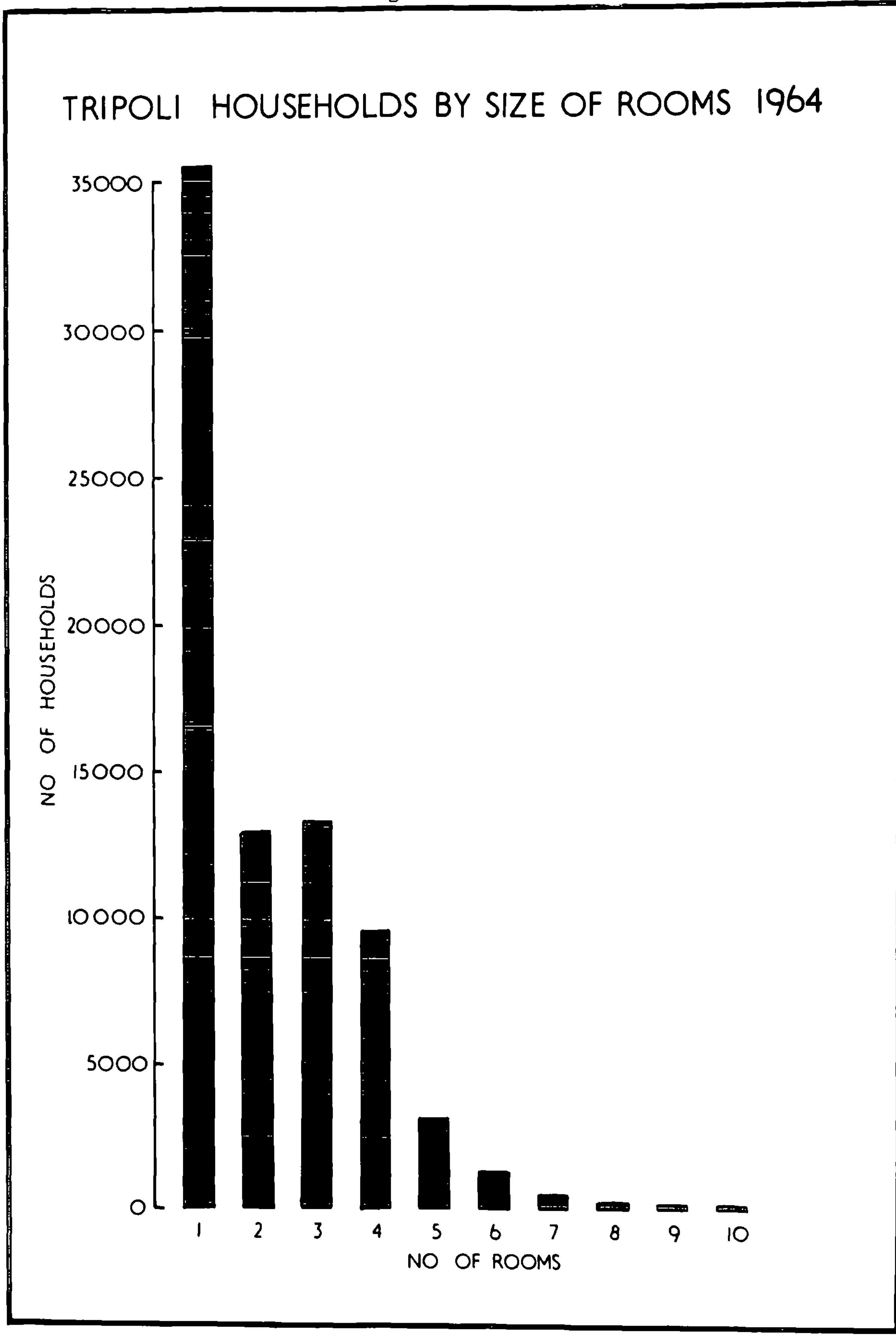
6 9 HOUSING RENT

Although housing rent is highly important for any particular housing study within the residential areas of Tripoli its consideration in great detail is not possible This is due primarily to the absence of the adequate data on rents The Italian housing legislation issued in 1936 was effective until 1951, when Libya became independent, but the Libyan government did not issue new legislation concerning the Rent Act On the contrary, the Central Libyan Government is in favour of rent decontrol, because it wants to encourage private builders to develop more lands for housing purposes, and to solve the accommodation problems of both British and American forces families stationed in Tripoli

Furthermore, the Municipality of Tripoli granted in 1952 all private developers of new dwellings freedom from property taxes for a period of five years This decision and the oil discoveries stimulated many Arabs, Jews and Italians to invest their money in housing development At the same time, the demand of the oil men for accommodation has given the landlords the opportunity to charge unfixed rent The higher the demand for houses, the higher the rent The rent of a villa in 1956 was £L 40-50 per month, and the rent for a flat was £L 30-40 per month At the present time, the rents are considerably higher than ten years before, and will be examined later

The housing rents within the Old Town are comparatively

Figure 6 6


TRIPOLI HOUSEHOLDS BY SIZE OF ROOMS 1964
35000
30000
25000
20000
15000
10000
5000
0
NO OF HOUSEHOLDS
1
2
3
4
5
6
7
8
9
10
NO OF ROOMS

low This is due primarily to the old structure of these dwellings which were mainly built during the eighteenth and nineteenth centuries As a result, these are generally deteriorating, damp and not fit for human habitation They also lack piped water, bathrooms, water-closets, etc Congestion makes the dwellings socially undesirable, and so poorer people are living in them Consequently, the rent is low, varying slightly from one house to another according to the size of the house in terms of number of rooms In addition, the site, accessibility and general maintenance of the traditional dwelling play an important role in determining the actual rent However, the rent does not exceed £L 20 per month for a large house and £L 10 per month for a bad sited house In general, the old dwellings are only desired by the poorer people who seek cheap accommodation

About two-thirds of the households are tenants from low income groups They are mostly new residents who have migrated to Tripoli since 1956 Some of them rent the whole house, others rent single rooms whose average rent is £L 3-5 a month, depending on the size of the room The house normally comprises several families, each occupies one room sharing the housing facilities with other families Many of the householders are owner-occupiers who are generally poor and have inherited these houses from their fathers or grandfathers

The housing rent in other types of dwellings such as new traditional houses, villas and flats, has a different pattern, varying considerably from one type of these dwellings to another (Fig 6 7)

Table 6 5 Housing rents in Tripoli, 1967-68

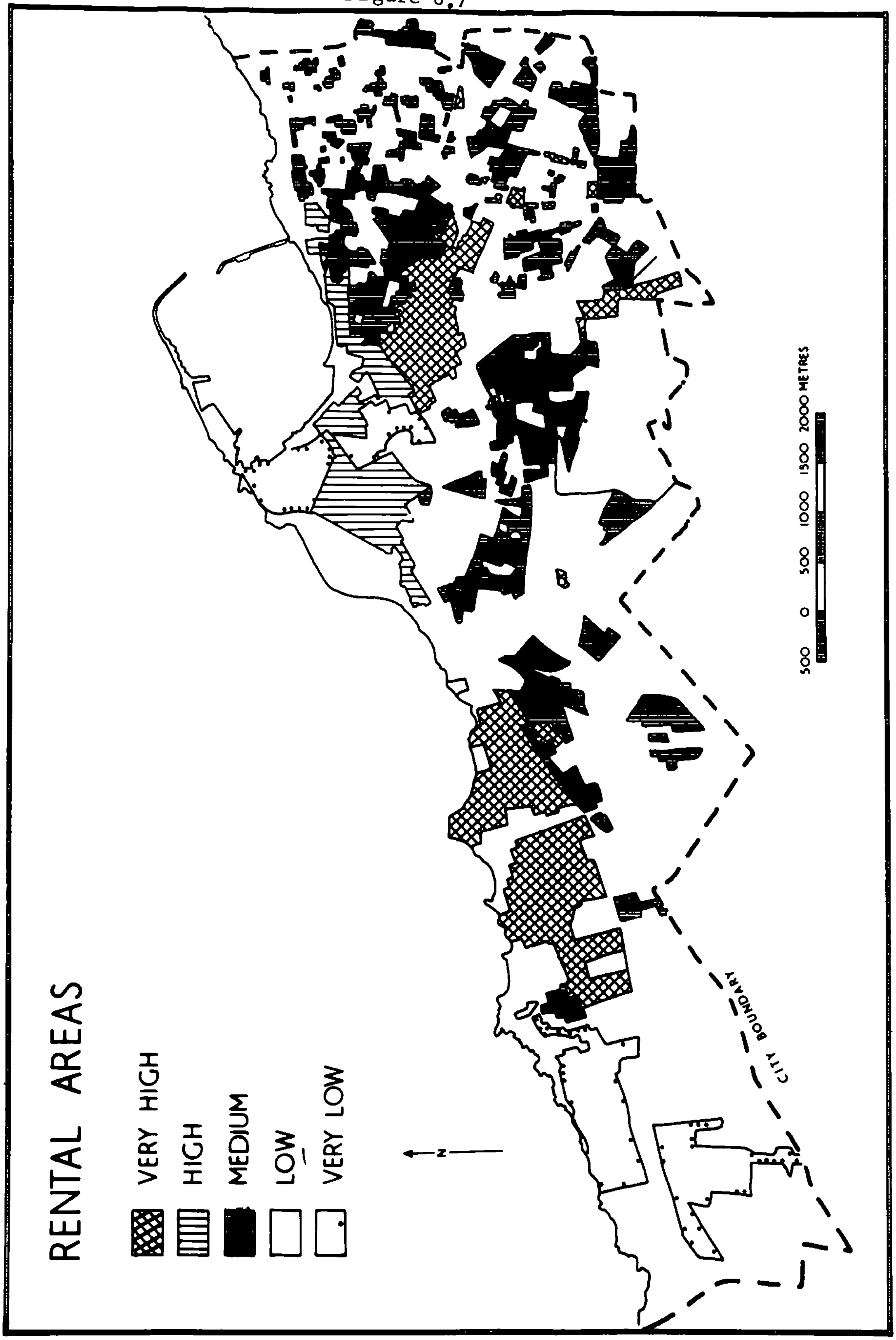
Type of dwelling	No of samples	Minimum rent in £L			Maximum rent in £L			Average rent in £L		
		£	s	d	£	s	d	£	s	d
Traditional houses	193	20	0	0	30	0	0	25	9	0
Flats	66	25	0	0	60	0	0	44	0	0
Villas	60	60	0	0	100	0	0	70	0	0
Total	319									

Source Field Work Survey, 1966-1968

Table 6 5 reveals that all new traditional houses which are concentrated in the newly built-up areas within the middle and outer zones have lower average rent than villas and flats Both minimum and maximum rents are also lower than other types of dwellings The tenants of these houses are mostly new and old in-migrants as well as other middle class people and Government employees who favour living in these dwellings for mainly social reasons

The average housing rent for flats is medium Old flats which are concentrated within the central business district have minimum flat rent Here most of the tenants are Italians, Jews and other nationalities Some of those tenants have occupied the flats since the Italian rule, Jews have occupied

Figure 6.7


RENTAL AREAS
VERY HIGH
HIGH
MEDIUM
LOW
VERY LOW
N
500 0 500 1000 1500 2000 METRES
CITY BOUNDARY

them since the Second World War The owners of the flats are Italians, Jews and Arabs, who let their properties to their own nationalities As a result, the rent is generally low It is noteworthy that when an Italian tenant wants to leave his flat, the landlord usually lets it to another Italian tenant The same procedure is implemented by Jews, Libyans rarely rent these flats

New flats in the new multi-storey buildings which were erected since 1960, are located within the central business district and near the King's Palace (Gasr el Khold) The average housing rent is higher than in the old flats, and the rent reaches £L 60 per month (Table 6 5) Thus the rent is higher, and neither Italians nor Jews can afford to rent The tenants of these new flats are generally Americans, British and other nationalities, working either in the oil companies or in other commercial firms and banks Very few Libyans occupy these expensive flats They are mainly leased by the Government

At the present time, there is a tendency on the part of the aliens to leave these flats and move to villas in the suburbs where there is more freedom, space and less noise Moreover, parking cars in the streets within the CBD constitutes a very difficult problem to the traffic as well as to the residents of the flats who own cars Lastly, there is an increasing demand for flats to be used as offices, a factor which raises the rent

The housing rent of villas is high in comparison with other types of dwellings The rent generally ranges between £L 60-100 per month (Table 6 5) This is mainly attributable to the housing amenities of the villas such as a garden, a play ground for children, a garage and a store room Also the residents of villas can enjoy much privacy and tranquility The tenants are from high income groups, and are mostly Americans working either in the oil companies or at Wheelus Field (the American air base to the east of Tripoli), British or other alien families Libyan tenants are generally senior officials of the Central Libyan Government, and their number is increasing owing to the new Government policy of accommodating the servants in better houses The villas are leased by the Ministry of Housing and State Property

The Shanty Town represents the lowest rent area for accommodation in Tripoli This is mainly related to the fact that the land in which the Shanty Town is situated is owned by Tripoli Municipality The land was extensively afforested by the Italian Government in order to fix the sand dunes and protect the built-up area Since the Italian rule, squatters were attracted to this public land and settled down within it In recent years (1956-1966), the number of those squatters has increased enormously At the present time, there are more than ten thousand huts occupying a considerable part of the afforested land Each hut occupier pays 500 millims (10s) to the Municipality The rent is very low in comparison with the rent of a single room within the Old Town The great majority of the tenants are so poor that they can only occupy a one room hut This cheap accommodation is still drawing more squatters to construct their homes on this public land the congestion of these huts is very great

Tents are small in number, and found in the eastern part of Tripoli (El Nuflein quarter) within the Arab gardens The occupiers are mostly nomadic people who have recently migrated to Tripoli Each occupants has to pay one pound a month to the landlord of the garden more than the rent paid in the Shanty Town, because the tenant can get water free of charge and the family can enjoy more freedom of movement within the farm than is possible in the Shanty Town where dwellings are placed very close together

Broadly speaking, housing rents within the residential areas of Tripoli are governed by a number of factors Firstly, the demand for accommodation **has** increased in the recent years (1961-1967) on the part of the oil companies' families, the American Air Force, as well as the diplomatic corps Secondly, the central Libyan Government has contributed in the last five years to the intensity of **demand** for flats, villas and local houses This is primarily related to the decision of the local authorities to provide accommodation for both senior officials and civil servants, who naturally wish to take advantage of the new Government policy towards solving their accommodation problems This policy resulted in raising housing rents in all residential areas Thirdly, the shortage of adequate supply of houses is also responsible for the increased rent This may be explained by the fact that the restrictions imposed on foreign investments in house-building has not enlarged the existing stock of houses, because the local capital is limited and directed solely to villa building instead of high storey flats Therefore the demand for houses exceeds the supply, this in return maintains the high rents Lastly, no long-term housing development is inaugurated to satisfy the demand for houses

As a result, the Central Libyan Government, through the Ministry of Housing, did not set up a Rent Act which could create stability in housing rents within the market As some officials in the Government argued, rent control would not encourage the private developers to invest their money in house-building Furthermore, if rent control was imposed, it would create difficulties for oil company employees who wanted to find accommodation within the residential areas This could also be applied to the diplomatic corps and Libyan Government employees This was also the decision of the International Bank for Construction and Development Report on the Economic Development of Libya "Cheaper and quicker private building will do more than anything else to bring down the present extortionate rents in Tripoli and Benghazi and to alleviate the shortage of housing accommodation for Libyans living in these towns "(9) Also in the Report on 'The Inflation in

Libya,' rent control is not favoured This report stated "Rent of high cost houses should not be controlled now, due to the existence of over capacity on the one hand and the possibility of declining demand in the coming future on the other "(10)

Both views expressed above have not suggested any solution for the increasing rent of houses, not only within the high residential areas but also within other residential zones Unfortunately, the Central Libyan Government had adopted these views on the decontrol without taking into consideration the great impact of these measures on the economy of the city in general and on the limited income groups in particular People who belong to these categories are mostly working in the Government offices They could not afford to pay approximately one-third of their salaries for rent, so the Government was obliged to assist them by offering either housing allowances ~~of~~ government-owned dwellings Thus, the Government has involved itself in another financial burden

Other people from the middle and low income groups who are working for the oil companies, business, trade, transportation, etc are also suffering from rising house rents They cannot afford to change their old semi-derelict accommodation for better houses Also most of the young married couples are obliged to live with their parents after marriage, as they cannot afford to pay the high rents asked for new accommodation The poor people find cheap accommodation in the Old Town and the slum areas where single rooms can be rented Other poor families have to live in the Shanty Town

Even the old tenants within the Arab residential areas are subjected to rising rents The landlords are not satisfied with their property rents and frequently ask for an increase on the grounds that the rent is not adequate to keep pace with the rising cost of living

This lack of governmental control of rents and the demand for accommodation being continually larger than the building programme, is contributing enormously to the rising cost of living index in Tripoli This situation will do nothing to help the low income groups to find suitable accommodation, nor to decrease the amount of semi-derelict property, in particular the Shanty Town

6 10 PROPERTY TAXES

Detailed figures on property taxes are lacking, the only available data is that the rateable value on rented houses is 8% of the total annual rent of the rented houses This percentage is taken annually by the Department of Property-Taxes from the property owners The 8% rate tax is conditioned by the fact that the landlord's income exceeds £L 300 a year This rateable value is standardized and is based on a flat rate and not on a graduated income tax scale As a result, the property taxes are comparatively easy to assess and collect

It is estimated that the total property taxes obtained from rented dwellings are £L 150,000 a year within the residential zones of Tripoli Most of the landlords of the Old Town and other slum areas do not pay any rates for their properties because their annual incomes do not exceed £L 300 Thus most of the property taxes are collected from the middle and high-class residential areas

The tenants of both Arab and modern dwellings are not required to pay any rates for using accommodation It is interesting to note that the rating system in Tripoli is based on the Italian legislation which is still effective throughout Tripolitania

6 11 THE PROBLEM OF REPLACEMENT AND SLUM CLEARANCE

The Old Town of Tripoli is in need of replacement, particularly the old dwellings which were built prior to 1880 These dwellings are located in the western and northern parts of the Old Town Here the houses are derelict or semi-derelict due to their age (the majority are over 100 years old) and to the construction materials Limestone, the principal building material, is to be affected by the climatic change Heavy torrential rain during winter brings about a chemical change in limestone, resulting in holes forming In time, the stone work crumbles The flat roofs of the traditional Libyan house accentuates this process, due to water retention Therefore the life of these houses can seldom be prolonged over 80 years

Also most of the landlords neglect to undertake any maintenance as the rents are very low, and the tenants generally refuse to make any essential repairs, owing to the high cost of such an operation

Moreover, the Municipality of Tripoli has not taken any legal measures to protect the old houses from deterioration, because the Archaeology Department of Tripolitania considered all dwellings of the Old Town as valuable archaeological buildings which must be preserved for their historical value Therefore demolition and replacement are not allowed without permission of this department This decision is based on the Italian Archaeological Act which aimed to maintain the Arab and Turkish style of buildings within the Old Town The Italians probably aimed through these legislations to prevent the Arabs from living in modern housing areas

Unfortunately, both the Municipality of Tripoli and the Archaeology Department have not reviewed the Italian Act in the light of the present conditions of the old dwellings On the contrary, they are still insisting that the Italian Act should be effective so demolition and replacement are not allowed to take place on any dwelling, provided that the dwelling is not going to fall down As a result, deterioration and decay are extremely active, affecting the whole built-up area and a slum appearance is distinctly emerging in many residential areas of the Old Town, particularly Bab el Bahr, Homat Garian and Mahallet el Baladia (Plate 6 7)

<u>The Report on Housing in Libya</u> stated that there are 21,000 good houses, 4,000 needing amelioration and 9,500 needing replacement These figures are an underestimate, but the

Plate 6.7(A) Semi-derelict houses in Zenghet el Fenedga - Old Town

Plate 6.7(B) Semi-derelict houses in Zenghet el Baggar.

hard fact is that most of the existing old houses in both the Old Town (2,492) and other Arab old dwellings (1,508) which are found outside of the town, are unfit for human habitation They are mostly very old, damp and lacking adequate amenities People who are still living in these houses complain of ill health

Apart from the bad lay-out of the old dwellings, the mediaeval pattern of streets and the lack of transport means, they are overcrowded by working class families who can only afford to rent single rooms This overcrowding, together with inadequate maintenance, has accelerated the deterioration of the physical structure of these houses and has created slum conditions

The 9,865 hut dwellings of the Shanty Town represent the worst housing conditions, because they are entirely unfit for human habitation Therefore they should be replaced by better houses

6 12 <u>HOUSING NEEDS</u>

It is difficult to predict the housing needs of Tripoli for the next twenty years This relates to a variety of reasons the principal one being the lack of any basic information on headship rates (heads of households) This impedes analysing any future housing needs

At the present time, the housing needs include primarily all unfit dwellings of the Shanty Town (9,865) and tents (177) These dwellings represent the most urgent needs which have to be taken into consideration The Report on Housing in Libya suggests a further 16,120 dwellings are necessary for reducing the density of families per dwelling within Tripoli from 1 37 to 1 10 (11) This figure is based on the fact that "a density of 1 10 families per dwelling is considered a desirable one as well as a realistic one for Libya, since in no country is this density less than 1 05 1 10 families per dwelling is then the density which is set as the goal for the end of the housing programme, whatever its period may be "(12) Therefore the overall housing needs for the time being are 26,162 dwellings This figure sounds reasonable and could be achieved through short term programmes

As far as the future housing needs of Tripoli for the ten years 1964-1974 are concerned, they may be assessed in view of the following factors Firstly, the growth rate for the population of Tripoli between 1954-1964, was 2 95 per cent(13) and the projected population of Tripoli in 1974 is 284,340(14) (the population in 1964 was 212,577) This increase of population will be accompanied by an increase of households, and thus the estimated needs could be around 15,600, based on a natural increase and household size of 4 6 as calculated by the Ministry of Planning and Development (15) Secondly, in-migration of rural people to Tripoli is also an important factor in determining the probable increase of housing needs It is calculated by the writer that the number of in-migrants in Tripoli will be increased to 40,000 in 1974 This figure is based on annual in-migration of 4,000 people (see Chapter 7) Thus the housing needs for those in-migrants will be 8,695 dwellings Thirdly, the number of semi-derelict dwellings is of great significance in any future prediction of housing needs Unfortunately, there is no available data in this respect

In short, 24,295 dwellings represent the overall needs of Tripoli in 1974 These dwellings should be erected in order to solve the problem of the accommodation in the city for the new households

6 13 GOVERNMENT HOUSING SCHEMES

In 1936, the Italian Government initiated the first housing schemes in Tripoli, one in the Shara Ben Ashur and the other in the Shara el Srim The housing schemes comprised 103 dwellings, 63 in the Shara el Srim and 40 in the Shara Ben Ashur The Italian Government, through these schemes, aimed to house the Italian settlers who migrated from Italy to Tripoli to work as technicians and artisans Moreover, the Italian Government planned to continue this housing programme so that it could solve the housing shortage as far as Italian migrants were concerned But the outbreak of the Second World War in 1939 stopped the Italian Government from completion of these housing schemes

The Italian settlers remained in these houses until 1958, when they began to evacuate themselves They moved to other rented dwellings in the Shara el Garbi, and their houses were occupied by Libyan families

When Libya became independent in 1951, the Provincial Government of Tripolitania began to look at conditions which existed in the Shanty Town In 1956, the local authorities succeeded in building 464 small housing units in a chosen site near the Shanty Town called Bab Accara to the south of Tripoli These dwellings are terraced and each house has only two small rooms plus a courtyard All dwellings are built of the same size with no provision being made for larger families The windows which were designed to open on the outside of the building were blocked up by the occupants Also the layout of these housing units did not provide any special privacy to conform to the traditional habits of the occupants It is noted now that the residents added palm-leaves and clay in the front doors of dwellings so that they might not be seen by the passers-by

In general, the design of these dwellings was not carefully planned by either the Italian architects or by the Provincial Government, because the dwellings lack all housing facilities However, these housing schemes did not solve the whole accommodation problem of the inhabitants of the Shanty Town, because the Government dwellings are mostly occupied by Government employees and their families In other words, the dwellings were given to the people who had a better standard of living than the Shanty Town people

In 1961, the Provincial Government of Tripolitania began another housing scheme, aiming to rehouse the limited income groups of Government employees and civil servants Under this scheme 40 houses were built in the Shara Ben Ashur quarter near the previous Italian housing scheme Furthermore, in 1965, the Central Libyan Government through the Ministry of Public Works built other housing units

Table 6 6 Government Housing Units in Tripoli, 1965

Locality	No of new dwellings
Hani	200
Omar el Mukhtar	40
Shara el Shatt	32
Buchini	96
Gargaresh	100
Total	468

Source Ministry of Housing and State Property, Tripoli, 1967

(a) Hani housing units are situated to the east of Tripoli within the Shara el Kebir quarter They are designed on modern Italian styles of architecture but with the provision of a courtyard to conform to the Libyan traditional habits Each single storeyed house comprises three rooms plus a kitchen and an Arab type lavatory Its facilities consist of piped water and electricity Other social amenities such as mosques, cinemas and shopping centre are lacking The occupants of these dwellings are civil servants especially policemen, drivers etc whose incomes are quite small (Plate 6 9)

Plate 6.8 Huts of the Shanty Town

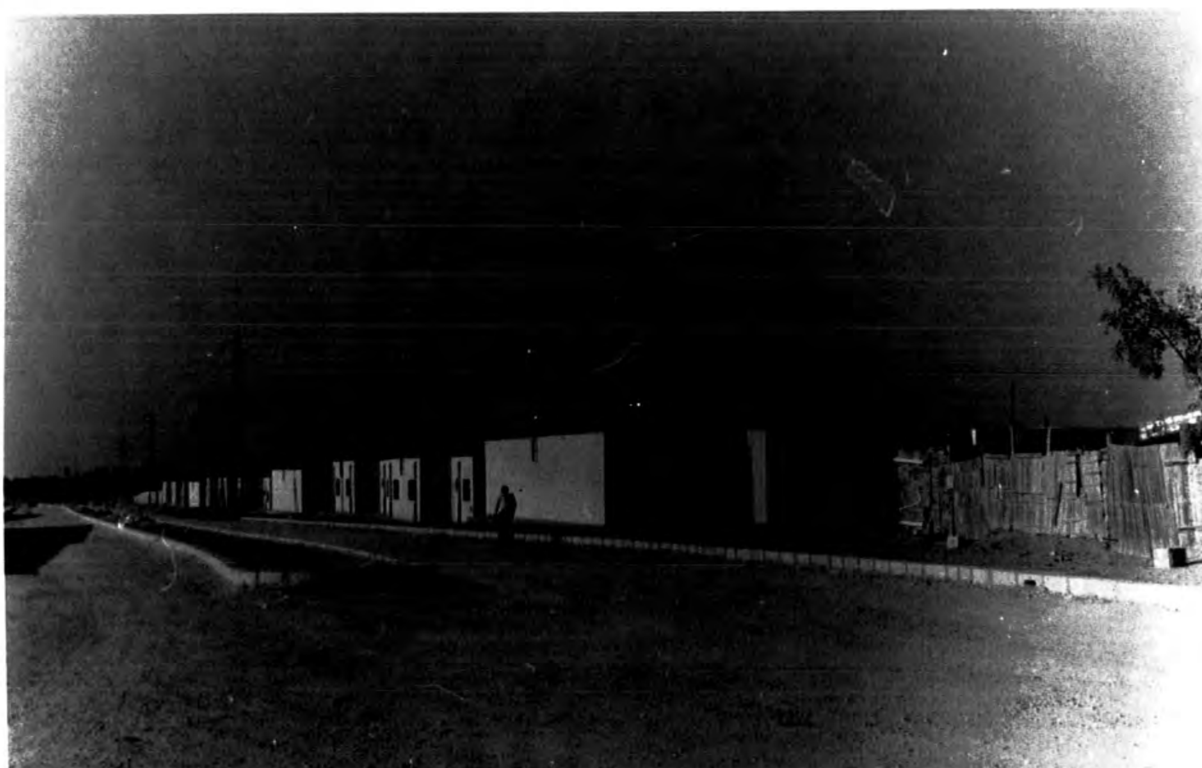


Plate 6.9 Hani housing units near Tarhuna Gate

(b) The Omar el Mukhtar housing units are located to the west of Tripoli within the Central Business District These units consist of two multi-storey buildings containing 40 flats All flats are now being occupied by Government civil servants of higher income than those occupying the Shara el Kebir houses (Plate 6 10)

(c) Buchini housing units consisting of 96 flats are sited in the Shara el Garbi quarter They are well designed on modern architectural standard and are inhabited by Libyan civil servants in the executive branches

(d) The Shara el Shatt's housing units are found to the east of Tripoli near the offices of the Central Libyan Government The dwellings are flats occupied by senior official civil servants

(e) Gargaresh housing units are located within the western part of Tripoli where the villa zone is found They consist of villas designed especially to accommodate the families of the Libyan Government ministers as well as high official civil servants

All these housing schemes were built to solve the accommodation problem of the Libyan Government civil servants who could not afford to pay high rents demanded elsewhere in the city Therefore, the Government on her part to help them has provided subsidized accommodation for these employees These housing units were not carefully planned by housing experts, but they provided accommodation for 468 families belonging to different income groups The priority in terms of allocation

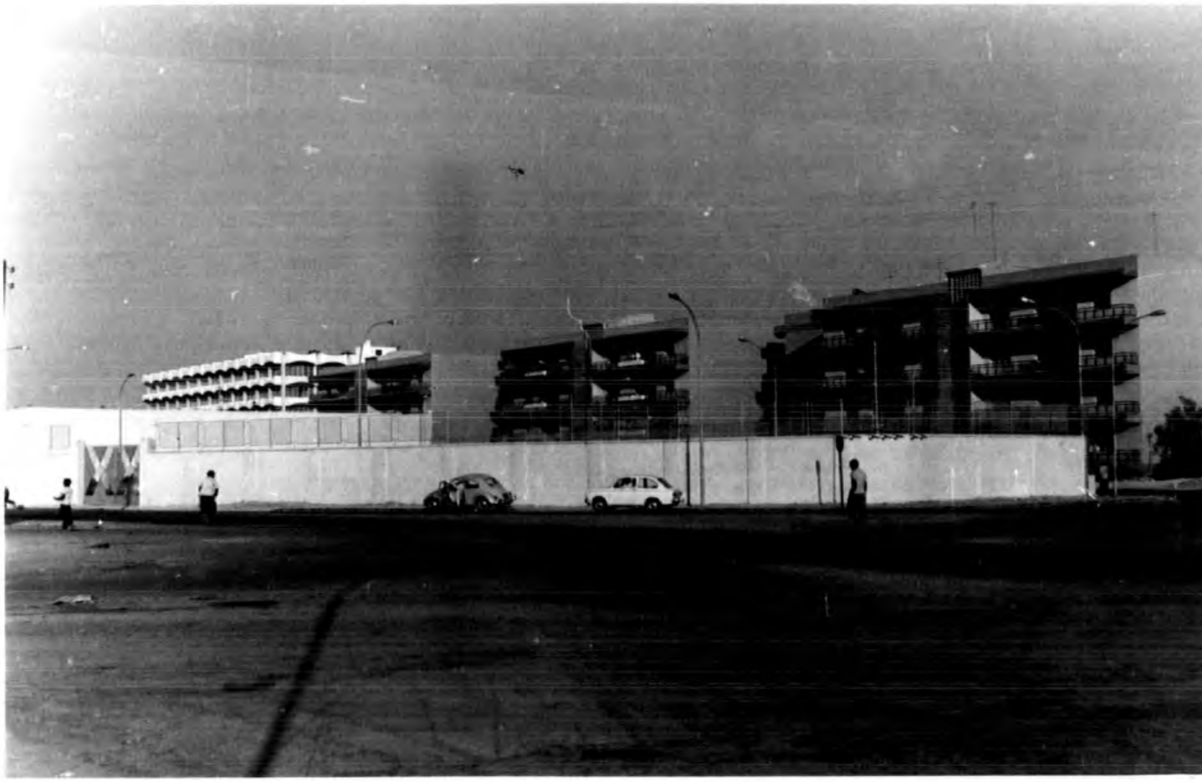


Plate 6.10 Government multi-storey buildings in Omar el Mukhtar street

Plate 6.11 Government Housing Scheme in Hadba el Khadra

of these dwellings was given to the Cyrenaican employees, policemen's families and Tripolitanian civil servants who migrated to Tripoli from the rural areas

However, the 468 dwellings erected by the Central Libyan Government, only accommodated a very small proportion of the total number of the Libyan Government employees who number 23,180 in the city itself Therefore about 90 per cent of these employees have no Government accommodation at all A high proportion of them live in their parent's houses within the slums, others, who number 6,000, have been leased houses by the Ministry of Housing and State Property

In 1963, the Central Libyan Government announced a new housing scheme for overspill population of Tripoli The chosen site was virgin land and owned by the State in the El Hadba el Khadra six kms to the south-west of Tripoli Although the area is administratively situated within the Municipality of Suk el Juma, it is more linked economically and socially with Tripoli Two thousand houses were completed by a Libyan building firm in 1965 The design of these new dwellings is more elaborate than the First Provincial Housing Scheme of 1956, and conforms to Libyan traditions The dwellings are terraced and each occupies 150 sq metres comprising two rooms plus a kitchen and Arab lavatory with provision of a courtyard (Plate 6 11)

These 2,000 new dwellings are not yet occupied owing to the lack of public utilities such as piped water, electricity and sewerage system In addition, there is no provision for other services i e shopping centre and social amenities These houses will eventually be allocated to the Shanty Town's people In short, this housing scheme will create a new town for the overspill population who are generally poor and cannot afford to build their own new houses Although the scheme will not solve the whole problem of the Shanty Town, it will provide accommodation for some of the poorer families

The Idris housing scheme is to be considered the biggest scheme ever planned in Libya The scheme was announced by the Central Government of Libya in 1965, and it is based on a wide national scale and will include all the urban centres as well as the rural areas The Government through the Ministry of Housing and State Property will build 100,000 dwellings, of which 60 per cent will be in rural areas The remainder will be allocated for housing development within the urban centres The housing scheme will cost the Government £L 400 millions, and will be completed by 1971

The first stage of the Idris housing scheme consists of building 9,199 dwellings, and will cost the Government £L 52 millions The distribution of these dwellings is proposed as follows -

Table 6 7 Idris Housing Scheme in Libya, 1967-1971

Muqataa	No of dwellings	Percentage
Tripoli	1,828	19 8
Zawia	650	7 1
Garian	975	10 6
Homs	476	5 2
Misurata	668	7 3
Sebha	376	4 1
Ubari	364	3 9
Benghazi	1,777	19 3
Beida	889	9 7
Derna	1,196	13 0
Total	9,199	100 0

Source Ministry of Housing and State Property, 1967

The distribution of the number of dwellings shows that the highest number of dwellings will be built in the largest towns, where the housing shortage is more acute, e g Tripoli, Benghazi and Derna Tripoli as the largest town in Libya would have 1,828 new dwellings, the largest number under the first stage of the Idris housing scheme (Fig 6 8) Only 65 per cent of the dwellings will be built within the city, the remainder will be erected elsewhere within the Muqataa boundary The dwellings will cost £L 10 27 millions

Figure 6 8

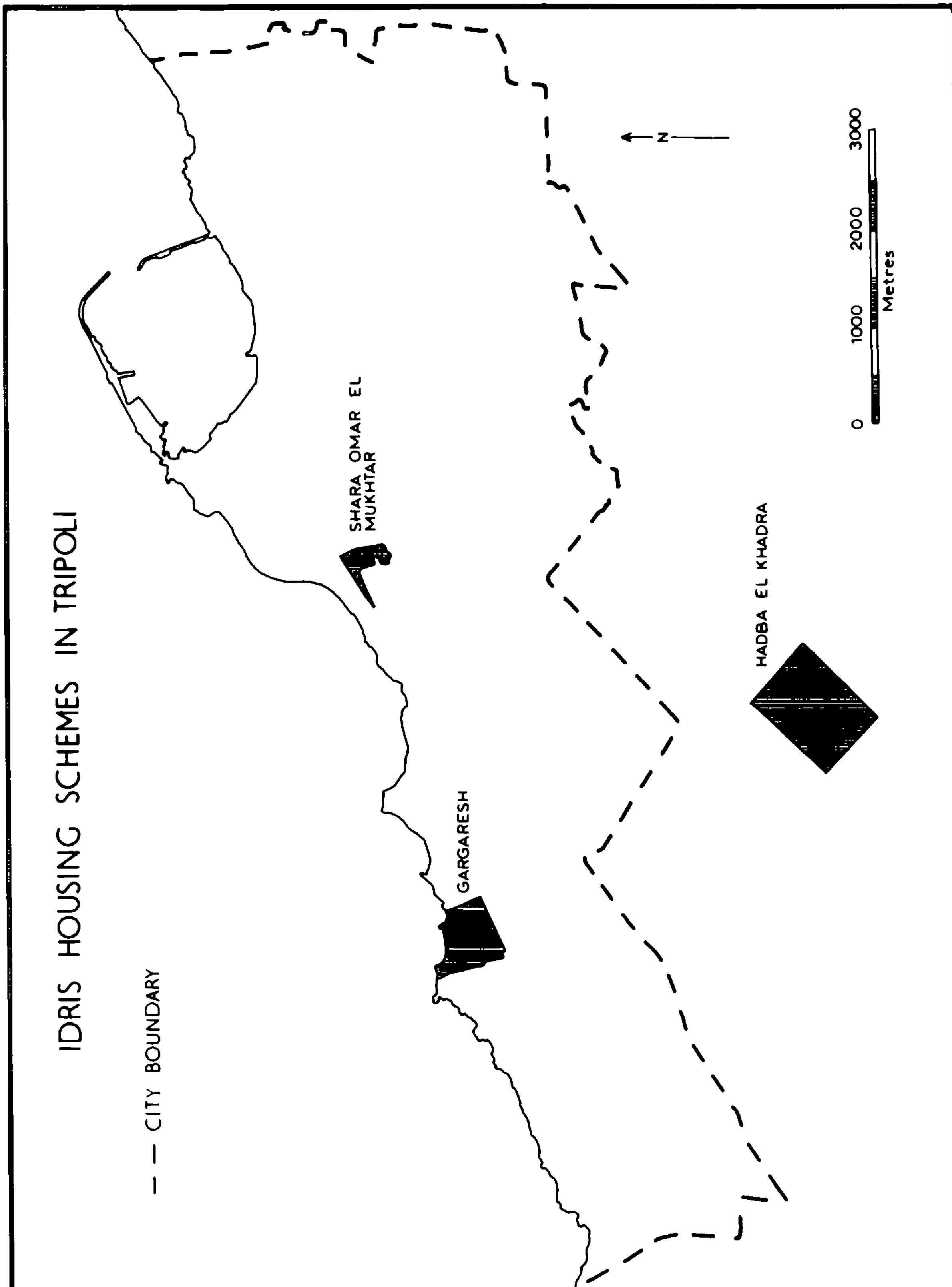

IDRIS HOUSING SCHEMES IN TRIPOLI
CITY BOUNDARY
SHARA OMAR EL MUKHTAR
GARGARESH
HADBA EL KHADRA
N
0
1000
2000
3000
Metres

Table 6 8 Idris Housing Units within Tripoli Muqataa, 1967-1971

Locality	Libyan traditional houses	Flats	Total
Tripoli city	600	598	1,198
Army	50		50
Suk el Juma	100		100
Tajura	60		60
Azizia	60		60
Ben Gashir	60		60
Suani Ben Adem	60		60
El Khetna	60		60
El Regheat	60		60
El Elawna	60		60
El Garabulli	60		60
Total	1,230	598	1,828

Source Ministry of Housing and State Property, 1967

Conclusion

It can be seen that both land speculation and inflation of prices have influenced housing rents in Tripoli In addition, the greater demand for houses by the in-migrants, Government civil servants and oil companies, have also contributed to the rise of housing rents Shortage of housing stock, together with the absence of building societies is also significant factor This has, in fact, resulted in the emergence of the

Shanty Town   Both the Idris housing scheme and the improving mortgage system may ease the housing shortage and ultimately it is hoped reduce the rents in proportion to the incomes of the tenants

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CHAPTER VII

DEMOGRAPHIC ANALYSIS

A population study of Tripoli is of vital importance to the understanding of the urban growth of the city and its functions The population represents the dynamic force which affects the whole urban growth of the city Therefore detailed analysis is needed for a full understanding of the urban society in terms of its historical growth and its natural increase Moreover, the active population represents the economic force of the society Consequently, its study and demographic analysis are of great importance Urban densities within the residential quarters of Tripoli are also significant to the urban geographer, as they reflect the processes of urban growth in relation to certain socio-economic forces Finally, projection of population is of vital necessity in order to understand the future trends of the city population and their urban densities All these factors will be examined in detail in the following chapter

7 1 POPULATION GROWTH

It is estimated by travellers that the population of Tripoli in 1509 A D was about 10,000 (1) During the occupation by Spaniards and by the Knights of St John (1510-1535) the population declined to 5,000 owing to war losses and insecurity resulting in out-migration of people to the nearby oasis of Tajura During most of the Ottoman Administration which extended for a period of four centuries (1535-1911) the only available information on the population of Tripoli was given by Miss Tully who stated in her diaries that the city of Tripoli contained 14,000 inhabitants in 1785 By contrast, the British consul in Tripoli estimated the population of the city as 25,000 in 1790 (2) More precise information is impossible to locate, thus the figure for Tripoli's population at the end of the 18th century would seem to lie between the two estimates given above At the close of the Turkish Administration, the Turks carried out a census of population of Tripoli and Tripolitania as a whole The Turkish census of 1911 gave the following figures (3)

Table 7 1 Population of Tripoli, 1911

Locality	Libyans	Jews	Total
Old Town	12,287	10,376	22,663
El Menshia	7,620	95	7,715
Total	19,907	10,471	30,378

The Old Town had six quarters in 1911 (Mahallet el Baladia, Khushat el Suffar, Homet Garian, Bab el Bahr, El Hara el Kebira and Hara el Saghira) comprising 53 0 per cent of the population The Menshia area had 16 quarters containing the res

Table 7 2 Dıstrıbutıon of Populatıon wıthın Trıpolı quarters ın 1911, 1954 and 1964

	Quarter	Population in 1911	%	Population in 1954	%	Population in 1964	%	Increase or decrease between 1954-64 %
1	Belkheır	2,159	7 1	16,173	12 4	17,341	8 2	1 4
2	Bu Harıda	536	1 8	3,004	2 3	5,001	2 4	2 4
3	Dahra	2,328	7 7	10,652	8 2	10,742	5 4	0 1
4	El Nufleın	626	2 0	2,488	1 9	4,173	1 8	2 0
5	Shara el Garbı	545	1 8	4,968	3 8	19,015	8 9	18 3
6	Shara el Kebir	917	3 0	6,796	5 3	15,629	7 4	10 7
7	Bab el Bahr	2,262	7 5	6,023	4 6	6,125	2 9	0 1
8	Gargaresh	363	1 2	2,600	1 9	14,989	7 1	15 0
9	Kura el Baladıa (Shanty Town)	-	-	19,060	14 5	25,061	11 8	7 3
10	Homet Garıan	5,315	11 5	7 752	5 9	6,751	3 1	1 3
11	Mahallet el Baladıa	1,740	5 7	5,532	4 2	4,974	2 3	0 8
12	Mızran	2,073	6 8	12,773	9 8	12,461	5 8	0 3
13	Kushat el Suffar	2,277	7 5	5,499	4 3	4,970	2 3	0 6
14	Shara el Bay	572	1 9	4,124	3 2	6,915	3 2	3 4
15	Shara el Srım	360	1 2	4,397	3 5	10,067	4 6	6 9
16	Shara el Shatt	205	0 7	842	0 7	1,307	0 6	0 5
17	Shara el Zawıa	609	2 0	5,787	4 5	14,960	7 0	11 1
18	Shara Ben Ashur	1,032	3 4	7,575	5 8	25,555	12 2	21 0
19	Zawıet el Dahmanı	1,054	3 5	4,193	3 8	6,541	3 0	2 8
20	Hara el Kebıra	2,524	8 3	-	-	-	-	-
21	Hara el Saghıra	3,788	12 5	-	-	-	-	-
22	Maqtaa el Hajar	716	2 4	-	-	-	-	-
23	Bu Slim	180	0 5	-	-	-	-	-
	Total	30,378	100 0	130,238	100 0	212,577	100 0	100 0

Source: 1911, 1954 and 1964 Census

In 1911, the high concentration of population within the Old Town was primarily related to security reasons The outer quarters of the Menshia were not safe because of prevalence of various crimes such as housebreaking and robbery Consequently, businessmen, traders, shopkeepers, and those who possessed wealth, were forced for their security to live in the Old Town Moreover, the offices of the Turkish Administration, security forces and other social organizations were located in the Old Town Hence the population density was 608 7 persons per hectare

The distribution of ethnic groups was uneven The Libyan population constituted 61 7 per cent of the total of the Old Town's population They were concentrated in four residential quarters The rest of the population was composed of Jews, 98 8 per cent of whom were concentrated in the residential quarters of El Hara el Saghira and El Hara el Kebira, an indication of marked segregation

The Menshia area with 3,414 hectares was larger than the Old Town Residential quarters were scattered throughout the whole area, most were located within agricultural lands, as a large proportion of population were engaged in agriculture Consequently, the distribution of population throughout the whole Menshia was scattered with a low population density of three persons per hectare

The first Italian census (de jure) of 1931 gave Tripoli a population of 58,521 (4) The second census (de facto) of

1936 gave the city a population of 66,479 [5] No information was given in either censuses on the distribution of the population within the city quarters

The Libyan Government with the help of U N technical advisors conducted the first national census on August 1st, 1954 (see Table 7 2), when 130,238 were counted in Tripoli The distribution of population within the city in general can be classified as follows -

1 The Old Town with its four quarters (Mahallet el Baladia, Kushat el Suffar, Bab el Bahr and Homet Garian) which had a population of 24,206 or 19 0 per cent of the total population of the city in 1954

2 The new town with its fourteen quarters which had a population of 87,372 or 66 4 per cent of the total

3 The Shanty Town which had a population of 19,060 or 14 5 per cent of the total

It is interesting to note that the population of the Old Town increased from 16,103 in 1911 to 24,806 in 1954, a net increase of 8,703 The Menshia area of the new town, on the other hand, experienced a population growth of 76,961 between 1911-1954, from 10,471 in 1911 to 87,372 in 1954

Four quarters have vanished from 1954 census, namely El Hara el Kebira and El Hara el Saghira, Maqtaa el Hajar and Bu Slim The inhabitants of the first two quarters were Jews who emigrated to Palestine from 1947 onwards Maqtaa el Hajar was annexed to Dahra quarter, and Bu Slim quarter was annexed to Suk el Juma district The Shanty Town or Kura el Baladia emerged as a new residential area from 1929 onwards when the Italian Government established this quarter as a settlement area for rural in-migrants

The two main factors associated with the growth of the urban population of Tripoli between 1911 and 1954 are natural increase of population due to improvement in health services, and in-migration of rural people, particularly after the Second World War, who came to the city seeking employment in the private sector or in the civil service, police force or army

In 1964, the Central Libyan Government conducted another general census for the whole country This took place on August 1st, 1964 The census gave the following figures (6)

Table 7 3 Population of Libya and its two capitals, 1964

	No of population
Libya	1,564,369
Tripoli	212,577
Benghazi	137,295

Tripoli's population constituted 13 6 per cent of the total, whereas Benghazi represented 8 7 per cent In the 1954 census Tripoli constituted 11 9 per cent and Benghazi formed 6 4 per cent (69,718) of the total population of Libya (1,088,889) (7)

Table 7 2 reveals that the highest population concentration occurred in the Shara Ben Ashur, Shanty Town and Belkheir quarters In general, 15 out of 19 quarters experienced an increase in population The quarters may be grouped as follows

1 Declining quarters such as Mahallet el Baladia, Homet Garian, and Kushat el Suffar and Mizran The first four quarters are located within the Old Town, whereas Mizran lies within the central business district This decline in population is primarily related to deterioration of the dwellings of the above quarters, transfer of some of these to workshops and warehouses and finally to the improvement of the standard of living together with the desire of the inhabitants to live in better housing conditions

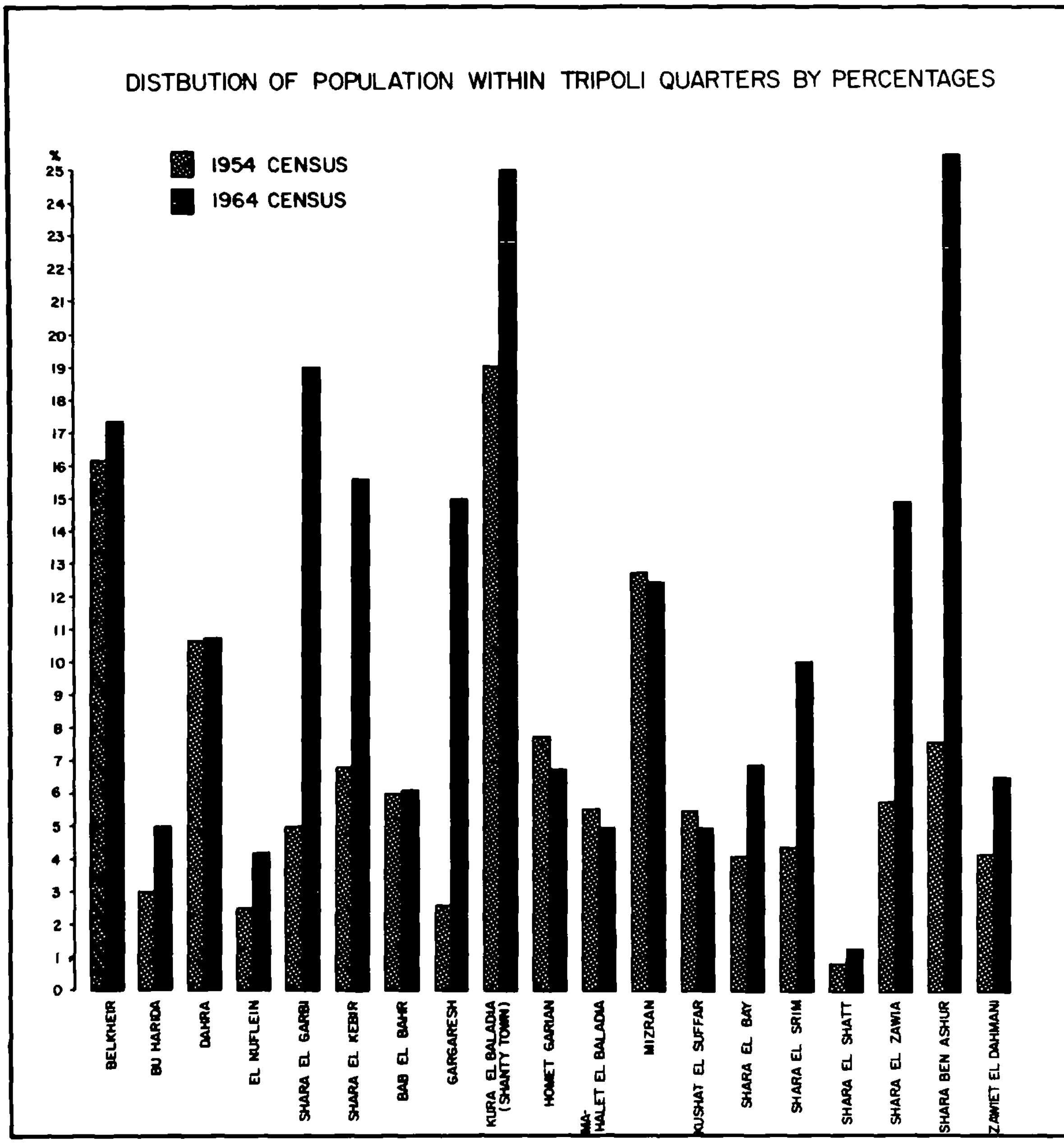
2 Static or near static quarters, such as Belkheir and Bab el Bahr, suffered from deterioration and the transfer of use from residential to commercial and industrial functions (warehouses and handicraft workshops)

3 Dynamic growth quarters include all the new residential areas within the middle and outer zones (Fig 7 1)

Population growth rate

Between 1954 and 1964, the total population of the city increased from 130,238 to 212,577 - an increase of 82,339 persons This represents a growth of 6 3 per cent per annum over the decade In-migration over the same period was put at 40,824 by the Municipality of Tripoli (see Table 7 7) Hence in-migration and natural increase contributed roughly equal shares to Tripoli's total population growth Natural increase was estimated at 2 95 per cent per annum by the Ministry of

Figure 7 1


DISTBUTION OF POPULATION WITHIN TRIPOLI QUARTERS BY PERCENTAGES
1954 CENSUS
1964 CENSUS
%
BELKHEIR
BU HARIDA
DAHRA
EL NUFLEIN
SHARA EL GARBI
SHARA EL KEBIR
BAB EL BAHR
GARGARESH
KURA EL BALADIA (SHANTY TOWN)
HOMET GARIAN
MAHALET EL BALADIA
MIZRAN
KUSHAT EL SUFFAR
SHARA EL BAY
SHARA EL SRIM
SHARA EL SHATT
SHARA EL ZAWIA
SHARA BEN ASHUR
ZAWIET EL DAHMANI

Planning and Development, tallying with the calculations above [8] Such a high rate of natural increase is feasible because of the recent urban expansion, general improvement in health services and a corresponding lowering of mortality particularly infant mortality Unfortunately, data on population growth of other Libyan towns are confusing and overestimated

The projected population for Tripoli in 1979 has been calculated by the Ministry of Planning and Development to be 328,676,[9] on the basis of a population growth rate of 2 95 per cent (see Table 7 2) This figure suggests that the city will only have an increase in population of 116,099 between 1964 and 1979 This 116,099 planned increase will be unevenly spread throughout the city For example, the Old Town and Mizran quarter (central business district) will not experience a planned increase in population Belkheir quarter which is also located in the central business district, will experience only a small planned increase in population Other quarters of the city will have a large increase in the number of their inhabitants, primarily due to the fact that these quarters are not fully built-up areas, and so there is much room for the residential area to expand outwards particularly on the uncultivated and waste lands

7 2 NATURAL INCREASE

In order to understand the natural increase in Tripoli it is necessary to examine in more detail the patterns of fertility and mortality within the city

Patterns of fertility

A rough measure of the fertility of the Libyan woman is furnished by the ratio of children under five years of age to women between 15-49 years old as enumerated in the 1936,[10] 1954[11] and 1964 censuses [12] This ratio is calculated at 683 children per 1,000 women in 1936, 672 in 1954 and 963 in 1964

The ratio for Tripolitania in 1954 is only 666 children to every 1,000 women, and 543 2 in 1964 The ratio for Tripoli city was 701 children per 1,000 women in 1954 and 955 in 1964 This figure for Tripoli suggests that the city women are more fertile than in Libya or Tripolitania as a whole

The crude fertility ratio for Libyans in Tripoli is calculated to be 54 1 and 90 9 in 1954 and 1964 respectively, while the crude fertility ratio for the alien population in the city in 1964 was 44 1 In Benghazi, the crude fertility ratio for Libyans was 57 3 and 85 3 in 1954 and 1964 respectively, whereas the crude fertility ratio for the aliens was 52.4 In other words, the crude fertility ratio for women in Tripoli was lower in 1954 and higher in 1964 than the crude fertility ratio in Benghazi [13] The reason for Libyan high crude fertility ratio in Tripoli is partly related to the generous family allowance and lack of family planning centres, as well as to the youthful age structure of the population

Reliable data on birth rates in Libya in general and

Tripoli in particular is lacking Pan in his "Population Studies on Libya" estimated the birth rates in Libya to be about 35-40 per thousand (14) Dr Shenwani gave a crude birth rate of 19 2 per thousand for Benghazi and 39 0 per thousand for Derna (15) His estimation however was based on some sample surveys on Cyrenaican towns in 1951

More recent figures by the Census and Statistical Department gave the following figures (16)

Table 7 4 Crude birth rates in three Muqataas, 1964-1966

Muqataa	Crude birth rates		
	1964	1965	1966
Tripoli	28 7	30 4	31 7
Benghazi	28 5	33 7	37 2
Jebel el Akhdar	24 0	33 3	39 9

Source Statistical Abstract, Tripoli, 1966, p 20

This figure shows that all the above Muqataas have experienced a rise in birth rates from 1964 onwards This indicates that the birth rates have not reached 40 per thousand as suggested by Pan but are not as low as suggested by Dr Shenwani, but the **rise** may be the result of increased reporting of births

The calculation conducted by the writer on the birth rates of Tripoli gave the following figures

Table 7 5 Birth rates in Tripoli, 1955-1967

	Libyans				Italians			
	Population (in December)	Births	Birth rate	Natural increase rate	Population (in December)	Births	Birth rate	Natu ral in- crea rat
1955	118,921	2,633	22 1	12 7	30,520	642	21 0	14
1956	122,872	2,716	22 1	14 7	30,312	624	20 5	14
1957	129,025	2,891	22 4	15 4	30,514	614	20 1	13.
1958	133,663	2,357	17 6	11 6	30,819	744	24 1	17
1959	139,647	3,303	23 6	17 4	30,523	659	21 5	16
1960	145,819	3,421	23 4	18 2	29,446	671	22 7	17
1961	153,327	4,046	26 3	21 7	27,705	597	21 5	15
1962	161,384	4,689	29 0	25 6	26 915	475	17 6	11
1963	170,088	4,896	28 7	24 9	26,659	579	21 7	16
1964	178,530	5,644	31 6	26 5	26,284	624	23 7	16
1965	189,010	5,758	30 4	23 2	26,509	359	13 5	19
1966	198,576	5,835	29 3	22 2	26 502	365	13 7	8
1967	207,496	6,313	30 4	24 9	25,382	272	10 7	6

Source Statistical Department, Municipality of Tripoli, 1968

Table 7 5 reveals increasing Libyan births and birth rates over the whole period, but the figures are seriously affected by under-registration The lowest birth rate of 1958 was probably due to unreported births at Tripoli Municipality, particularly on the part of the in-migrants of the Shanty Town and other residential areas where in-migrants are concentrated The average birth rates for 13 years is 25 9 per thousand This figure appears reasonable but it could be under-estimated

This rising birth rate may be primarily due to the improvement in health services within the city, particularly for expectant mothers and those with children

The birth rate for Italians is lower than that of the Libyans It ranges from 10 5 per thousand to 24 1 The low birth rates of 1965 onwards may be due to emigration of young married couples to Italy However, the average birth rate for 13 years is 19 4, which is probably related to the high standard of living among the Italian population

Mortality

There is no accurate information on death rates in Libya as a whole This is due to many reasons, firstly, deaths are not reported in rural areas Secondly, no reporting is usually made for infant deaths or for children dying under the age of 5 years This is so even in Tripoli city, especially among the low-income groups Thirdly, strict regulation is lacking concerning reporting on mortality

Pan estimated that the death rate in Libya in 1936 was 35 per thousand (17) In 1951, Dr Shenwani, a United Nations official, gave a crude death rate of 5 9 per thousand of population, and put infant mortality at 43 5 per thousand (18)

The Department of Census and Statistics of the Ministry of Economy and Trade gives the death rate figures for Tripoli as 4.4, 3 4 and 4 1 per thousand for 1964, 1965 and 1966 respectively (19)

The reported death rates for Tripoli between 1955-67, which are not very reliable, are calculated by the writer as follows -

Table 7 6 Death Rates in Tripoli, 1955-1967

Year	Libyans		Italians	
	Deaths	Death rate per 1,000	Deaths	Death rate per 1,000
1955	1,114	9 4	196	6 4
1956	901	7 3	176	5 8
1957	906	7 0	205	6 7
1958	808	6 0	181	5 8
1959	869	6 2	163	5 3
1960	768	5 2	149	5 0
1961	712	4 6	168	6 0
1962	562	3 4	187	6 9
1963	661	3 8	147	5 5
1964	921	5 1	184	7 0
1965	1,371	7 2	106	3 9
1966	1,225	6 1	130	4 9
1967	1,152	5 5	113	4 4

Source Statistical Department, Municipality of Tripoli, 1968

The average death rate for Libyans for these 13 years is 5 9 per thousand and the average among the Italian population is 5 6 per thousand for the same period More reliable figures on death rates for Tripoli were calculated by R Hartley who suggested that the crude death rates for Tripoli in 1954 and 1964 were 22 and 19 per thousand respectively, whereas Benghazi ratios were calculated to be 26 and 21 per thousand respectively [20] These figures imply that there was a decrease in death rates in Tripoli between 1954-1964 due to the steady improvement of health facilities for both adults and children Tripoli, for instance, has six hospitals with 2,520 beds The total number of doctors was 300 in 1966 (one doctor for every 766 persons), a very high rate for a developing country [21] Apart from the Government hospitals, there were more than 50 private and general clinics with surgery operation rooms as well as 36 dispensaries

Natural Increase

It is extremely difficult to calculate the natural increase rate for a country where the vital statistics on births and deaths are not accurate Nevertheless, the writer has calculated the natural increase rate for Tripoli city using the available information provided by the Municipality of Tripoli (see Table 7 5), but in fact, the natural increase rate is probably rather higher than these calculations owing to inaccuracy of registration of deaths and births It is suggested by R Hartley that the annual natural increase for Libya between 1954-1964 was 2 6 to 3 1 per cent [22] These figures may be also applicable for Tripoli

7 3 MIGRATION

Migration is also another contributory factor to the increased number of the population of the city, particularly between 1954 and 1964

In-migration

In-migration began with the Italian rule in Libya, and was stimulated by several factors First, many drought years have hit Tripolitanians, as in 1937 and 1947, and have resulted in the failure of harvests, particularly cereals and olive trees which were the most important elements in the rural economy Second, lack of capital to manage irrigated farms, particularly in Misurata, Zawia and Agelat, has forced many poor farmers to leave their land and to migrate to Tripoli Third, the fragmentation of agricultural lands within the rural areas of Misurata, Homs and Zliten is also responsible for this in-migration This is related to the prevalence of the shared inheritance system in Moslem countries which excludes primogeniture Fourth, it is suggested that the decline of the underground water resources and rising salinity in the soil are also responsible for the decline in the productivity of the traditional Libyan farms along the coast of Tripolitania and some parts of the Jefara Plain Fifth, population pressure on some agricultural lands, particularly in the Jebel regions such as Tarhuna, Garian, Yefren and Nalut has forced many villagers and garden owners to migrate to the city Sixth, oil exploration since 1956 and oil discoveries since 1959 have played an important role in attracting rural migrants to come to Tripoli seeking employment in oil companies

Social factors are also important, such as the impact of education on the young people encouraging them to seek jobs in the city The entertainment attractions of urban life (cinemas, night clubs, etc) are also significant elements in drawing rural dwellers to the city

In the Italian times, the number of in-migrants was restricted by the Italian Government who allowed only a limited number of the population to leave their farms When the Italian rule ended in 1943, Tripoli began to experience an influx of in-migrants who came to the city to work either in the British Army installations or at Wheelus Field American Air Base, 7 kilometres to the east of Tripoli A large number of workers, exceeding 3,000, were fully employed in these military installations After Independence in 1951 the number of in-migrants rose owing to increased availability of employment in Government services such as the police force, army, administration, commerce, transport and to some extent in industry Oil discoveries since 1959 and oil production from 1961 onwards have enhanced the in-migration from the rural areas to Tripoli (Fig 7 2) Rural migrants move initially to the city and then they are given jobs either in the city itself or in the oil companies' desert fields, but in both cases, the city becomes the new place of residence for them and their families

Figure 7 2

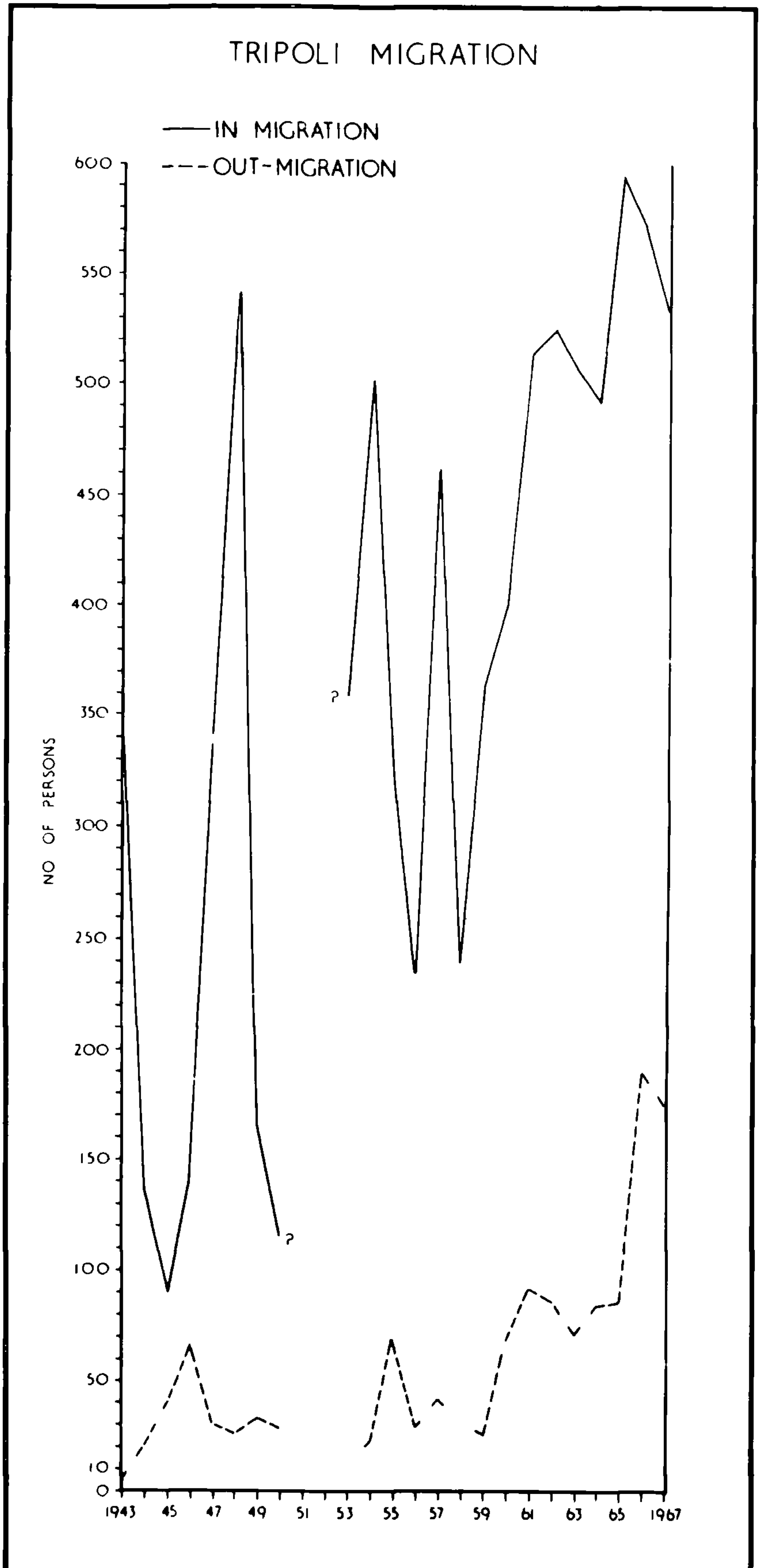

TRIPOLI MIGRATION
IN MIGRATION
OUT-MIGRATION
NO OF PERSONS
600
550
500
450
400
350
300
250
200
150
100
50
10
0
1943
45
47
49
51
53
55
57
59
61
63
65
1967
?
?

Table 7 7 In and Out Migration (Libyans) 1943-1967

Year	No of in migrants	Average per month	No of out migrants	Average per month
1943	3,414	284 5	50	4 1
1944	1,366	113 8	256	21 3
1945	900	75 0	403	33 6
1946	1,432	119 3	659	54 9
1947	4,473	372 7	360	30 0
1948	5,431	452 5	259	21 5
1949	1,665	138 7	330	27 5
1950	1,053	87 7	285	23 7
1951	?	?	?	?
1952	?	?	?	?
1953	3,589	299 0	127	10 5
1954	5,032	419 3	227	18 9
1955	3,266	272 1	702	58 5
1956	2,349	195 7	289	24 0
1957	4,634	386 1	418	34 8
1958	2,388	199 0	315	26 2
1959	3,641	303 4	257	21 4
1960	4,115	342 9	686	57 1
1961	5,147	428 9	909	75 7
1962	5,260	438 3	863	71 9
1963	5,081	423 4	711	59 2
1964	4,943	411 9	821	68 4
1965	5,971	497 5	855	71 2
1966	5,730	477 5	1,899	158 2
1967	5,351	445 9	1,747	145 5
Total	86,231	312 4	13,428	48 6

Source <u>Statistical Department, Municipality of Tripoli, 1968</u>

Table 7 7 reveals that considerable in-migration occurred in 1943 followed by fluctuation in numbers until 1950 The number of in-migrants recorded for 1953 was similar, but it began to increase especially after 1960 The average number of in-migrants per month varied from 199 in 1958 to 497 4 in 1965 The annual average of in-migrants is 3,749 persons for the periods 1943-50 and 1953-67

The Libyan in-migrants who returned from Tunisia and settled down in Tripoli are also important since they contributed to the increasing number of the city's immigrant population They started to return to Tripoli from 1957 onwards when the Tunisian Government began to adopt a new policy based on priority for Tunisians in employment, housing and social services This created difficulties for the Libyans to live in Tunisia In addition, many wanted to return home to benefit from the increased opportunities for work in Libya As a result the Libyans living in Tunisia began to return to Libya and their total number reached 26,695 by 1967 (December), of whom 10,099 settled down in Tripoli

Table 7 8 Number of Libyans who returned from Tunisia to live in Tripoli (1957-1967)

Year	No of in-migrants
1957-1963	1,548
1964	3,487
1965	2,657
1966	1,340
1967	1,067
Total	10,099

Source. Ministry of Labour and Social Affairs 1967

A high proportion of these in-migrants are concentrated in the Shanty Town, Shara el Garbi in Gurgi, and Gott el Shaal in Gargaresh The rest are widely distributed within the residential areas of the low income groups

Place of birth

The census of 1964 reveals that the total number of in-migrants living in Tripoli is 73,111 of whom 41,005 are males (56 per cent) (23) This male excess is due to the fact that males have more freedom of movement than females

The place of birth differs, but in general the majority of in-migrants come from Tripolitanian Muqataas (76 0 per cent of the total) In-migrants who were born in Cyrenaica represent 3 6 per cent, Fezzani in-migrants 5 6 per cent and Libyans who were born outside Libya 14 8 per cent

Table 7 9 Distribution and Number of In-migrants and their places of origin

Muqataa or Foreign Country	Male	Female	Both sexes	Percentage
Benghazi	1,034	845	1,879	2 6
Tripolitanian Jebels	8,935	6,723	15,658	21 4
Zawia	9,040	7,954	16,994	23 3
Homs	7,433	5,741	13,174	18 0
Misurata	5,705	4,012	9,717	13 2
Derna	230	151	381	0 5
Jebel el Akhdar	179	202	381	0 5
Sebha	2,651	1,229	3,880	5 3
Ubari	185	138	323	0 4
Foreign country	5,613	5,111	10,724	14 8
Total	41,005	32,106	73,111	100 0

Source Ministry of Economy and Trade, Statistical Dept , General Population Census, 1964, Muqataa of Tripoli, 1967, pp 34-35

Table 7 9 reveals that Zawia provided the highest percentage of in-migrants followed by the Tripolitanian Jebels Hom~~e~~s ranked third as a migrant source, followed by Misurata and foreign sources which had only slight difference in percentages

The new residential areas of the city contain more new in-migrants than the Old Town

Table 7 10 Distribution of in-migrants within Tripoli quarters, 1964

	Quarter	Number	Percentage of total population	Percentage of quarter population
1	Belkheir	4,089	5 6	23 5
2	Bu Harida	3,175	4 4	63 4
3	Dahra	4,578	6 2	42 6
4	El Nuflein	1,632	2 2	39 1
5	Shara el Garbi	8,879	12 2	46 6
6	Shara el Kebir	4,689	6 4	30 0
7	Bab el Bahr	1,699	2 3	27 7
8	Gargaresh	5,830	7 2	38 8
9	Kura el Baladia (Shanty Town)	14,158	19 4	56 4
10	Homet Garian	1,994	2 7	29 5
11	Mahallet el Baladia	1,237	1 7	24 8
12	Mizran	1,308	1 8	10 4
13	Kushat el Suffar	927	1 3	18 6
14	Shara el Bay	2,370	3 4	34 2
15	Shara el Srim	3,629	4 9	36 0
16	Shara el Shatt	205	0 3	15 6
17	Shara el Zawia	3,959	5 4	26 4
18	Shara Ben Ashur	7,339	10 0	28 7
19	Zawiet el Dahmani	1,414	1 9	21 6
	Total	73,111	100 0	-

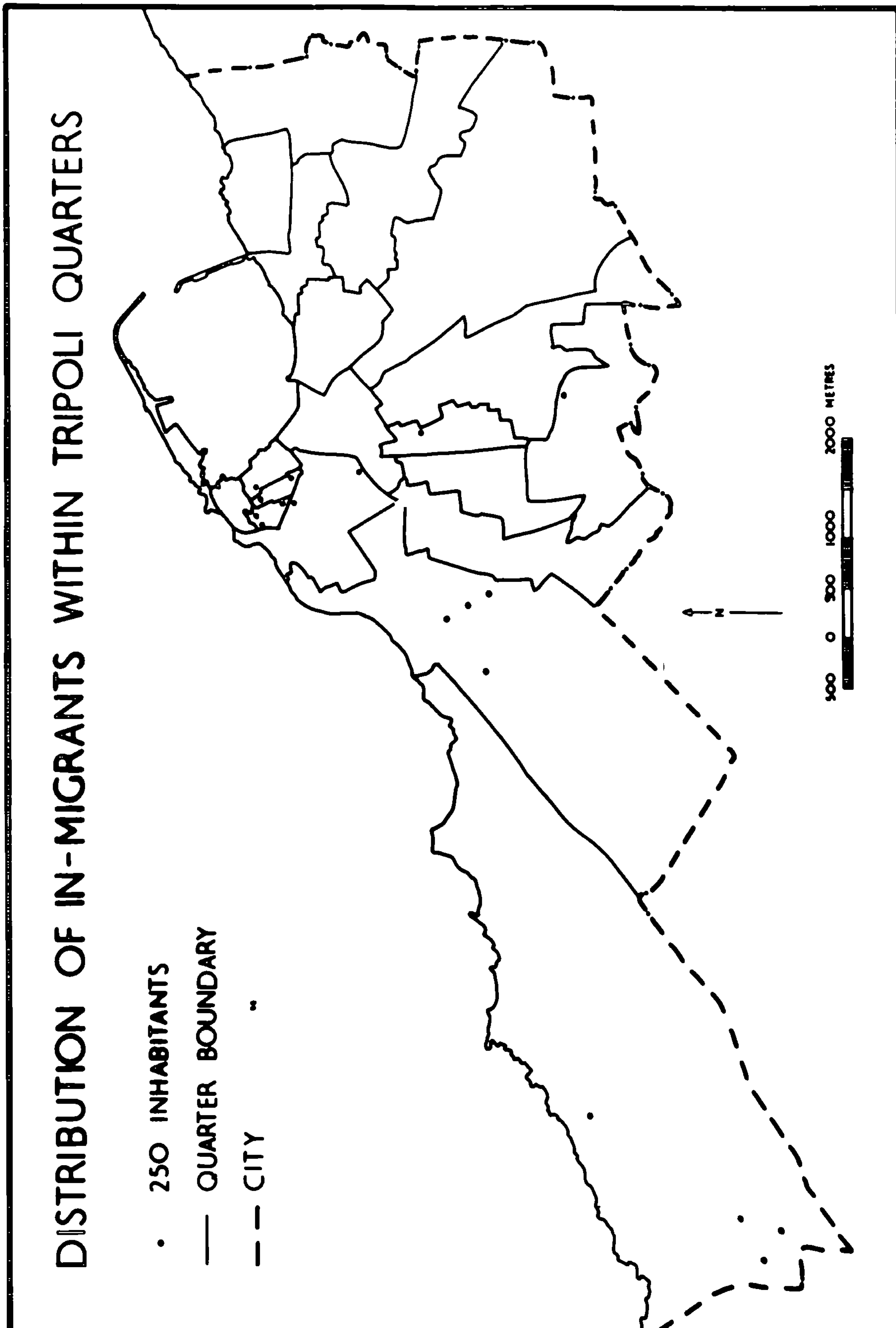
Source Ministry of Economy and Trade, Census and Statistical Dept., General Population Census, Muqataa of Tripoli, Tripoli, 1964, p 34

The highest percentage of new in-migrants is found in the Shanty Town to the south of Tripoli Shara el Garbi quarter ranks next Gargaresh and Shara Ben Ashur quarters have nearly similar numbers This concentration of in-migrants is due primarily to availability of lower rents and cheaper land, two factors which keep in-migrants from the city centre where rents and land prices are high Older in-migrants have settled within the Old Town (8 4 per cent of the total) and the remainder have resided within other residential areas of Tripoli (Fig 7 3)

Thus the distribution of in-migrants is uneven owing to their socio-economic status and the availability of cheaper land for the building of houses In general, the recent in-migrants, who are mostly poor, concentrate within the outer zone of Tripoli whereas better off in-migrants have settled in and around the central business district

The percentages of in-migrants of the total population of each quarter varied considerably (see Table 7 10), The highest percentages (41-63 per cent) occurred in Bu Harida quarter followed by the Shanty Town, Shara el Garbi and Dahra quarters Cheaper accommodation and shared housing were the main factors in creating such high percentages of new in-migrants in these quarters Quarters such as Zawiet el Dhamani, Shara Ben Ashur, Shara el Zawia, Mahallet el Baladia, Homet Garian, Gargaresh, Bab el Bahr, Shara el Kebir,

Figure 7 3


DISTRIBUTION OF IN-MIGRANTS WITHIN TRIPOLI QUARTERS
250 INHABITANTS
QUARTER BOUNDARY
CITY
N
500 0 500 1000 2000 METRES

Shara el Bay, Nuflein and Belkheir had an in-migrant percentage of 21-40 comprising old and new in-migrants Cheaper accommodation was also one of the factors attracting in-migrants to stay particularly within the quarters located within the middle and outer zones In the rest of Tripoli's quarters - such as Shara el Shatt, Kushat el Suffar and Mizran - in-migrants accounted for less than 20 per cent of the population, probably because of the lack of vacant accommodation within these quarters

Years of residence

There is no information published by the Department of Census and Statistics of stay of in-migrants in Tripoli In order to overcome this paucity of information, the writer conducted a sample survey in the Shanty Town, Shara el Garbi, Gargaresh and other residential areas This was necessary to throw some light on the period of residence for the rural in-migrants

Table 7 11 Years of residence of Tripoli in-migrants, 1967

No of years	No in sample	Percentage
Under one year	7	3 3
1-5	68	31 9
6-10	52	24 4
11-15	34	15 9
16-20	25	11 8
21-25	11	5 2
26-30	3	1 4
31-35	9	4 2
36-40	3	1 4
41 and over	1	0 5
Total	213	100 0

Source Field Work Survey (1967-1968)

A high proportion of the sample of in-migrants had resided in Tripoli for less than ten years, they represented 59 6 per cent of the total It is interesting to note from the survey that a high proportion of in-migrants who settled down in Tripoli recently came to Tripoli to find employment in oil companies, industry, construction, trade or government departments A very small proportion of in-migrants who were questioned stated that they had come to Tripoli to join their families Socio-economic forces and urban attractions have been the main stimulants of movements of the rural population to Tripoli

Out-migration (see Table 7 7)

Out-migration takes place primarily to Cyrenaica due to the opportunities for trade or employment created by the oil industry and its ancillaries This out-migration is generally undertaken by rural in-migrants who settle down in Tripoli for a few years and then move once again to Benghazi For example, out of 13,428 out-migrants from Tripoli in 1967, 4,275 were in Benghazi City and 597 in the Jebel el Akhdar Muqataa, males constituted 2,414 and 405 respectively Other out-migrants are found in other Cyrenaican towns, such as Ajdabia, El Marj, Derna and Tobruk

Out-migration figures have continued to rise since 1943 with some fluctuation The average annual out-migration since then is 583 persons, but the highest out-migration figure is recorded for 1966 This is probably due to the availability of employment in Cyrenaica which attracted many semi-skilled workers (Fig 7 2)

Generally speaking, both in- and out-migration have played an important role in the size of the city's population Tripoli for instance, gained 86,231 in-migrants against 13,428 out-migrants between 1943-1967 In addition, 15,544 Italians left Tripoli between 1943 and 1967, against 4,272 immigrants who settled there in the same period (see Tables 7 7 and 13)

7 4 ETHNIC GROUPS

Ethnic groups in ex-colonial cities such as Tunis, Algiers, Rabat, Casablanca etc have a useful economic role to play

Tripoli is no exception, here we find Italians, Jews, and various other nationalities contributing to the commercial and industrial activities of the city

In December, 1967 Libyans formed 207,496 out of the 244,149 inhabitants or 84 9 per cent of the total (24) They have various ethnic origins such as Berbers, Arabs, Arabised Berbers, Kologlis, and Negroes Unfortunately there is no available information on the distribution and percentages of such groups in either 1954 or 1964 population census, as the Statistical and Census Department dropped any kind of question on race or ethnic composition

Agostini's study of Tripoli sheds little light on the present day distribution of the population in the city since he based his study on ethnic groups in 1911 The 1936 Italian census is also of little value as it was based on ethnic distribution of the whole of Tripoli province which then had a population of 351,744 (25)

Table 7 12 Distribution of Libyan ethnic groups, 1936

Ethnic group	No of population	Percentage
Arabs and Arabised Berbers	278,312	79 1
Berbers	34,639	9 8
Turk-Berbers (Kologlis)	5,848	1 7
Negroes	11,831	3 4
Others	21,144	6 0
Total	351,774	100 0

Source Pan, C L , The Population of Libya, Population Studies, Vol 3, 1949, p 104

Table 7 12 based on the Province of Tripoli which included Tripoli city, the western coastal zone, and the Jebel regions, gives a general picture on the composition of the ethnic groups within the province Arabs and Arabised Berbers were classified as one group representing more than two-thirds of the total population Berbers comprised less than 10 per cent of the total population but were more numerous in the Jebel region Truk-Berbers or Kologis constituted less than two per cent and were concentrated particularly in Tripoli city

The Arabs in Tripolitania are related to two basic branches the Beni Hilal and Beni Seleim The former comprises the Al Atbeg, Beni Riah and Beni Zoghia, with two other groups of mixed descent, the Al Maakil and Beni Gushem The Maakil is found in the Jefara Plain and they intermixed with the urban population of Tripolitania (26)

The Berbers are regarded as the original inhabitants of Tripoli before the Arab invasion of the 11th century There were two main confederations of Berbers, the Branes and the Magadis which came from two localities north and south of the Aures mountains in Algeria Later, they spread over the whole coastal zone of Tripolitania including Tripoli city, and constituted the original inhabitants of Tripoli before the beginning of the Arab rule (27) At present the Berbers are concentrated in the Old Town

The Arabised Berbers are the result of intermarriage between the Arabs and Berbers, and they bear the racial characteristics of both

The Kologlis in Tripoli are the descendants of Janissaries from different areas of the Ottoman Empire who married native Arab or Berber women or even Christian women captured by the Barbary pirates They came to Libya during the 17th century and established the Karamanli dynasty which maintained its rule until the early part of the 19th century [28]

Negroes exist in Tripoli as a result of the slave trade between Libya and West Africa during the 18th and 19th centuries Their exact number at present is unknown

Jews are also an important element in the composition of the ethnic groups of Tripoli They lived in the city before the Arab conquest of Libya in the 7th century, and were regarded as indigenous people in Tripoli because they had settled in the city in the days of Emperor Vespasian As a consequence of the Arab invasion their number declined and later increased again in 1391 when Jewish immigrants came to Libya from Spain [29] At the beginning of the Italian rule their number exceeded 10,000 inhabitants, but once again, their number began to decline due to emigration to Palestine, particularly between 1946-1949

Before 1946-1947 Jews used to live in their own quarters "Hara el Kebira" and "Hara el Saghira" within the Old Town These two quarters resembled the ghettos of West European cities Jewish immigration to Palestine has reduced their number and concentration in these quarters At present they live within the central business district, numbering 6,395 persons or 2 6 per cent of the total population of the city in 1967 (30)

Italians are the largest foreign group in Tripoli They numbered 25,382 inhabitants, or 10 5 per cent of the total population, of the city in December, 1967 (31) Their first settlement in the city took place in the 18th century and their number increased later following the Italian occupation of Libya in 1911 Since then it rose considerably until it reached 40,000 before the outbreak of the Second World War From 1945 onwards their number started to decline due to their return to Italy Between 1953 and 1967 15,544 Italians emigrated to Italy (an annual average of 1,036 persons) whereas the number of persons who returned to Tripoli was 4,272 (an annual average of 28 persons)

Table 7 13 Immigration and Emigration of Italians in Tripoli, 1953-1967

Year	Immigration to the city	Average per month	Emigration from the city	Average per month	Increase or decrease
1953	815	67 9	1,127	93 9	- 312
1954	334	27 8	1,599	133 2	- 1,265
1955	309	25 7	1,141	95 0	- 832
1956	269	22 4	774	64 5	- 405
1957	309	25 7	417	34 7	- 108
1958	404	33 0	337	28 0	+ 67
1959	231	19 2	942	78 5	- 711
1960	252	21 0	1,727	143 9	- 1,575
1961	237	19 7	2,397	199 7	- 2,160
1962	375	31 2	1,410	117 5	- 1,035
1963	180	15 0	795	66 2	- 615
1964	128	10 6	818	68 1	- 710
1965	183	15 2	346	28 8	- 263
1966	104	8 6	227	18 9	- 123
1967	142	11 8	1,487	123 9	- 1,345
Total	4,272	-	15,544	-	- 11,272

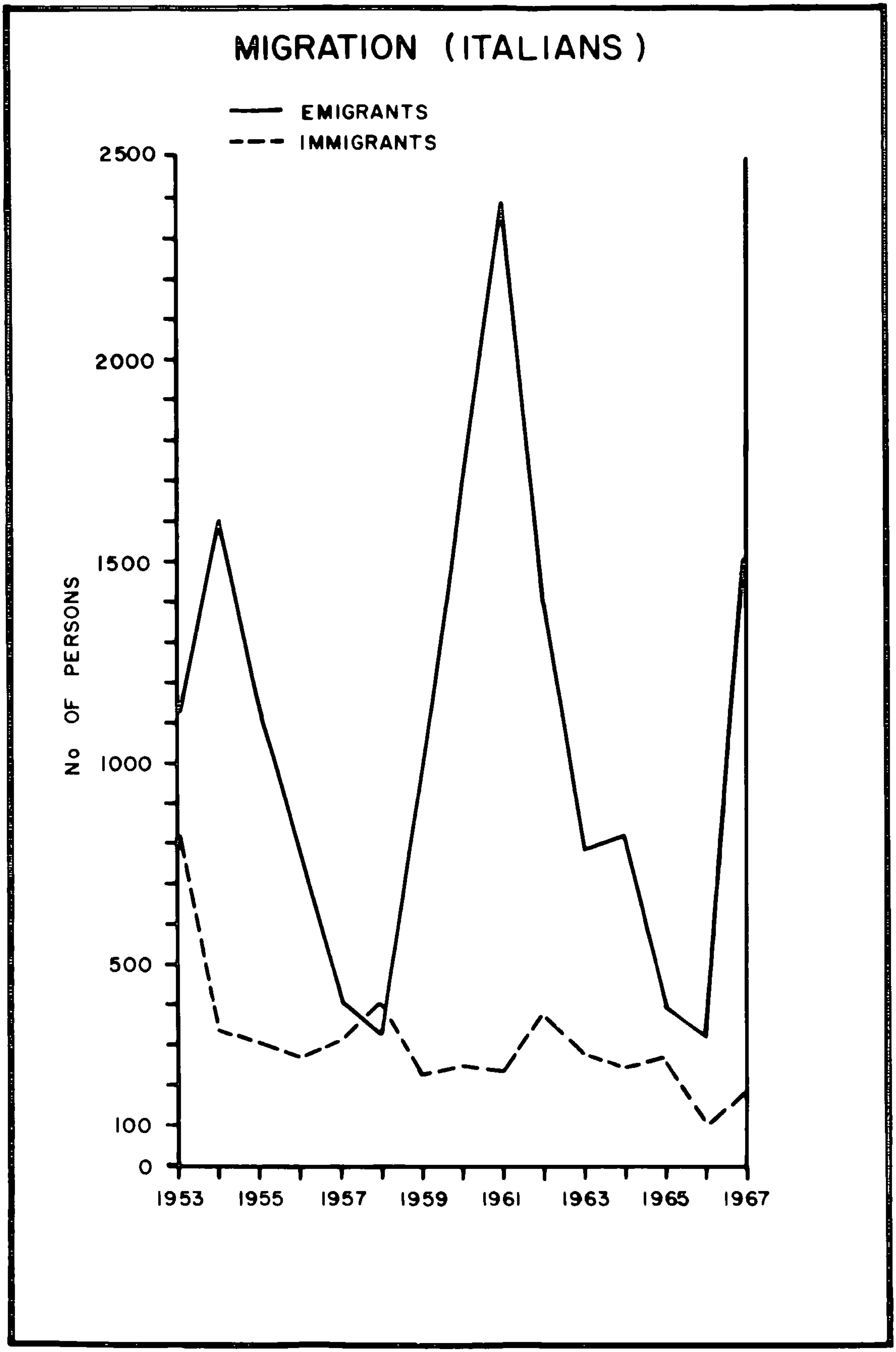
Source Municipality of Tripoli, Statistical Dept , Tripoli, 1968

Table 7 13 illustrates that there has been a steady outflow of Italians from Libya throughout the period 1953-1967 (Fig 7 4) Three notable features appear in this overall pattern, related to special factors First, the general policy of "Libyanization" was an important factor in causing the departure of Italians throughout the mid-1950s Return-migration occurred in the early 1960s which can be attributed to the easing of regulations concerning property sales in Libya and the export of money capital to Italy Finally, the Middle East War of 1967 resulted in renewed departures from Libya

The small inward flow of Italians to Tripoli City over the same period consists of skilled specialists (doctors, engineers and electricians) in demand in Libya As more skilled Libyans become available, this flow is lessening

Other European and Arab elements numbered 4,876 persons or 1 9 per cent of the total population of the city in December 1967,(32) they include British, French, Greeks, Maltese, Tunisians, Lebanese, Jordanians, etc Most of the Europeans and Americans work in oil companies and at the Wheelus Field (American Air Base), the rest are mainly foreign diplomatic staff

Figure 7 4



MIGRATION (ITALIANS)
EMIGRANTS
IMMIGRANTS
No OF PERSONS
2500
2000
1500
1000
500
100
0
1953
1955
1957
1959
1961
1963
1965
1967

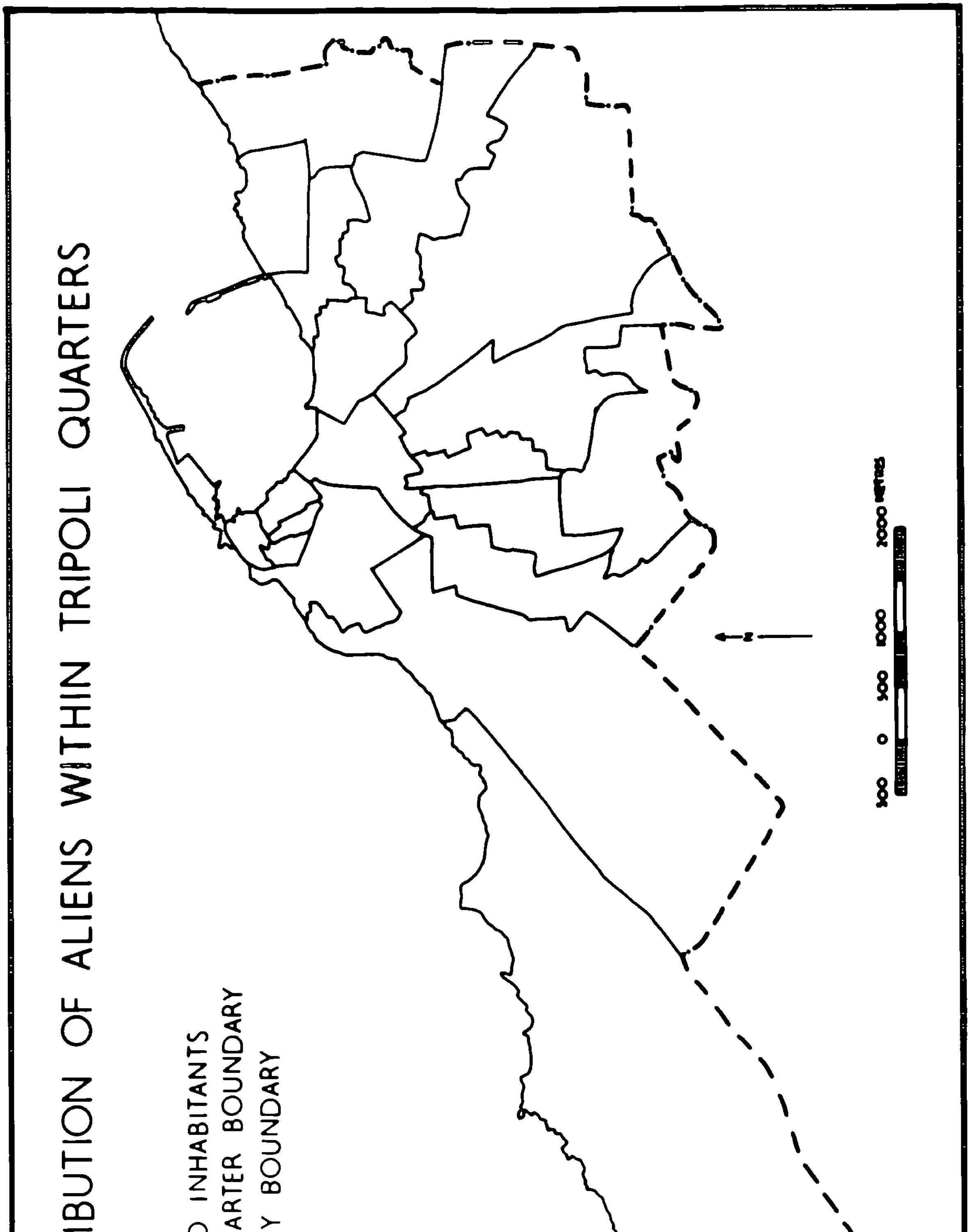
Table 7 14 Distribution of aliens within Tripoli's quarters, 1964

	No of aliens	Percentage
Belkheir	8,803	28 8
Bu Harida	325	1 1
Dahra	2,622	8 5
El Nuflein	36	0 1
Shara el Garbi	772	2 5
Shara el Kebir	296	0 9
Bab el Bahr	554	1 8
Gargaresh	3,920	12 7
Kura el Baladia (Shanty Town)	35	0 1
Homet Garian	230	0 7
Mahallet el Baladia	316	1 2
Mizran	5,547	17 9
Kushat el Suffar	184	0 6
Shara el Bay	525	1 7
Shara el Srim	544	1 7
Shara el Shatt	353	1 1
Shara el Zawia	1,997	6 4
Shara Ben Ashur	3,120	10 1
Zawiet el Dahmani	655	2 1
Total	30,834	100 0

Source Ministry of Economy and Trade, Census and Statistical Dept , General Population Census, 1964 Muqataa of Tripoli, Tripoli, 1967 p 34-35

Foreigners are found in all residential areas of Tripoli, with a special concentration in five quarters, namely Belkheir, Mizran, Gargaresh, Shara Ben Ashur and Dahra (Fig 7 5) which are the residential quarters of the upper and middle classes For example, the British, American and French concentrate in

Figure 7 5



DISTRIBUTION OF ALIENS WITHIN TRIPOLI QUARTERS
250 INHABITANTS
QUARTER BOUNDARY
CITY BOUNDARY

two residential areas - Gargaresh and Shara Ben Ashur - which are inhabited only by high income groups who can afford to pay high rents, such as those who work with the oil companies, at Wheelus Field or in the diplomatic corps

The Italians mostly live in the other three quarters, namely Belkheir, Mizran (central business district) and Dahra quarter, which were residantial areas during the Italian occupation of Libya

Other minorities such as Maltese and Greeks are concentrated generally in the residential quarters of the Old Town, namely Bab el Bahr and Mahallet el Baladia, simply because the majority of them are engaged in fishing and they prefer to live near Tripoli harbour

Out of 30,834 foreigners living in Tripoli, only about one-third were born in the city, the rest were born outside Libya (33)

Table 7 15 Number of foreign people born outside of Libya and their years of residence in Tripoli city, in 1964

Nationality	Under 1 year	1	2	3	4	5	10
Arab nationalities	211	175	185	141	133	183	133
British	650	777	508	211	68	156	54
Americans	1,113	1,272	1,250	523	212	285	35
Italians	140	111	107	122	74	245	585
Greek	19	19	28	15	23	41	21
Other nationalities	475	321	357	173	88	147	45
Unknown	1	5	6	8	5	5	-
Total	2,609	2,680	2,441	1,193	603	1,064	873

Nationality	15	20	25	30 yrs & over	Unknown	Total	Percentag
Arab nationalities	35	13	13	16	810	2,048	9 7
British	49	14	12	37	413	2,949	13 8
Americans	7	4	4	11	756	5,472	24 5
Italians	558	458	1,619	2,865	2,252	9,136	41 6
Greek	4	1	5	31	46	253	1 1
Other nationalities	29	15	3	21	319	1,993	9 1
Unknown	1	-	-	1	22	54	0 2
Total	683	505	1,656	2,982	4,618	21,905	100 0

Source Ministry of Economy and Trade, Census and Statistical Dept , General Population Census, 1964 Muqataa of Tripoli, Tripoli 1967, p 6

It is clear from Table 7 15 that the highest percentage of foreign people born outside of Libya are Italians Americans rank next and British subjects come third Arab nationalities and other European subjects have nearly the same percentages

7 5 AGE STRUCTURE

A study of the age structure of Tripoli is of crucial importance because of the significance of age to the economic activities of the working population as well as to social activities and other considerations, e g military service

By comparing the 1954 and 1964 censuses it becomes clear that the age composition has changed within a decade, owing largely to rising birth rates and declining death rates, especially infant mortality rates, as well as to the influence of migration Table 7 16 shows a clear difference in the age compositions of the two censuses, particularly of the population under 15 years of age which in 1964 composed 43 2 per cent of the total (Fig 7 6, 7 and 8)

Between 1954 and 1964, the total population of Tripoli city increased by nearly 82,500 people This represents an increase of 63 8 per cent over the ten year period - a rate representing growth by natural increase and in-migration in approximately equal proportions Since in-migrations are age-sex selective, it will be possible by a closer examination of both these elements to distinguish in which sections of the city population growth is occurring most rapidly

Regarding the comparison of the two censuses, both can be regarded as under-estimates of the population However, the 1964 census is likely to be more comprehensive than the first

As Table 7 16 shows, a major increase in the proportion of under 14 year olds occurred between 1954-1964 Some of this

Figure 7 6

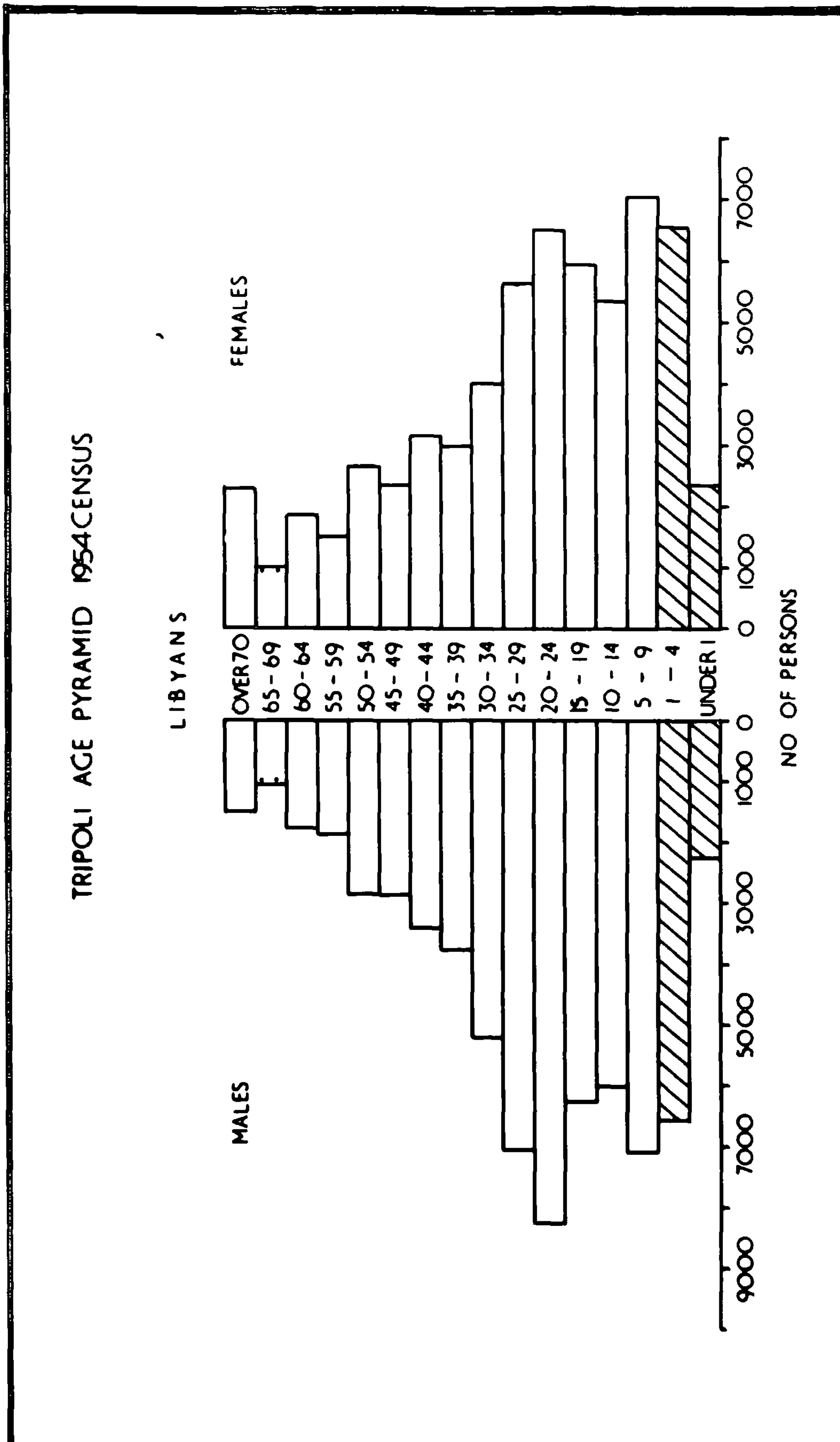

TRIPOLI AGE PYRAMID 1954 CENSUS
LIBYANS
MALES
FEMALES
OVER 70
65 - 69
60 - 64
55 - 59
50 - 54
45 - 49
40 - 44
35 - 39
30 - 34
25 - 29
20 - 24
15 - 19
10 - 14
5 - 9
1 - 4
UNDER 1
9000
7000
5000
3000
1000
0
0
1000
3000
5000
7000
NO OF PERSONS

Figure 7 7

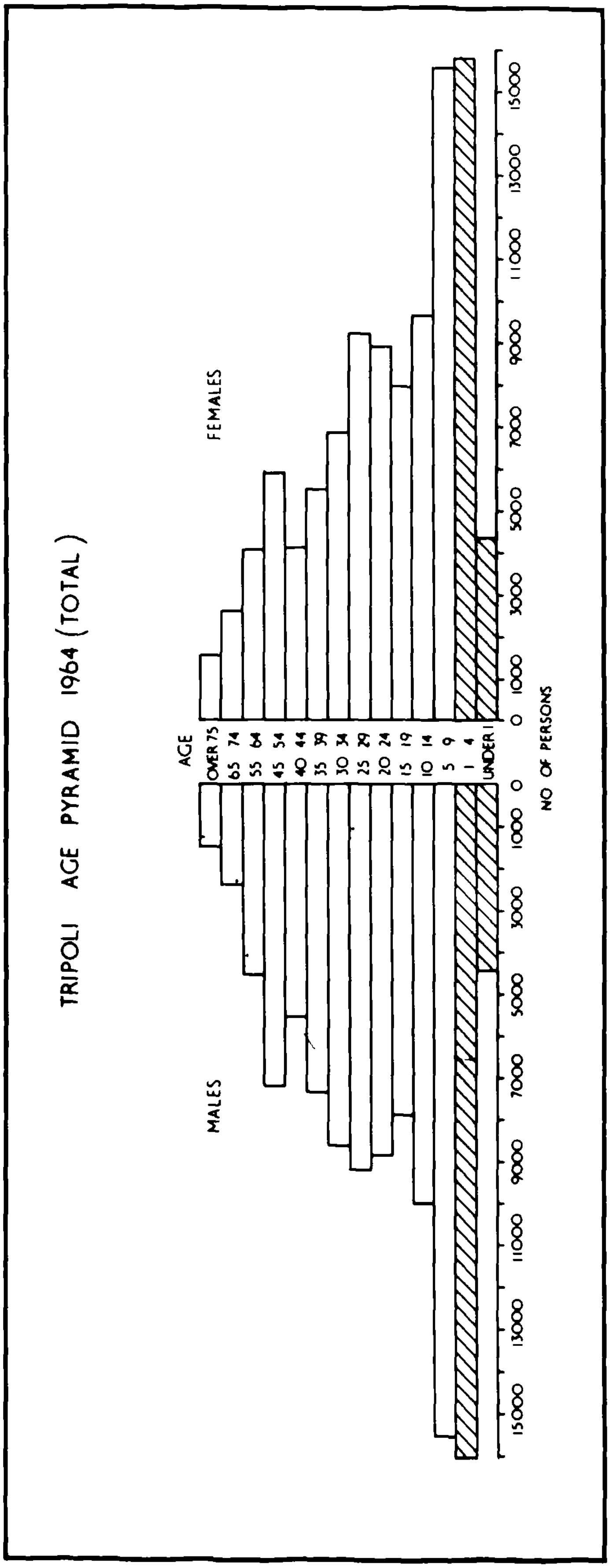
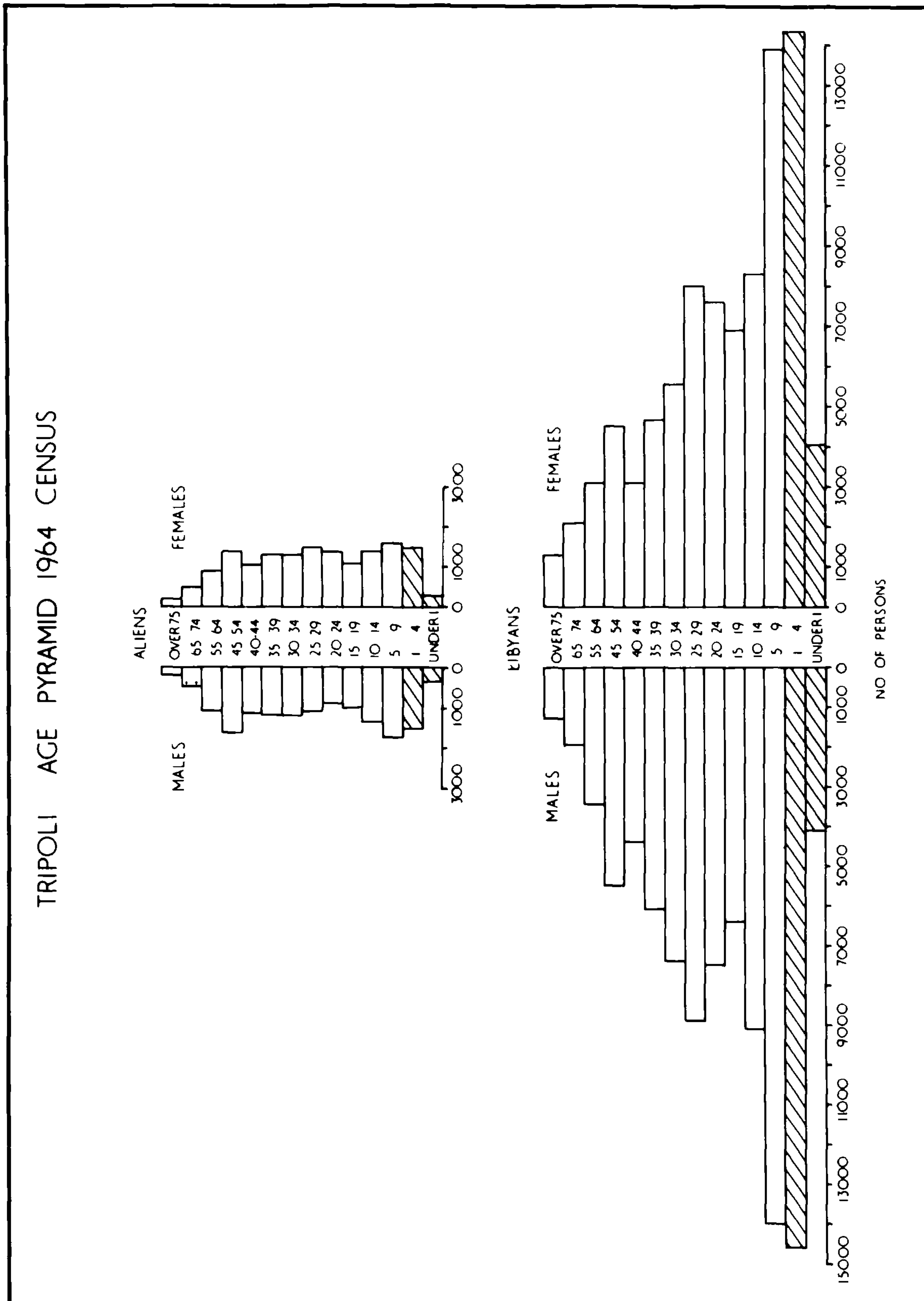

TRIPOLI AGE PYRAMID 1964 (TOTAL)
MALES
FEMALES
AGE
OVER 75
65 74
55 64
45 54
40 44
35 39
30 34
25 29
20 24
15 19
10 14
5 9
1 4
UNDER 1
0
1000
3000
5000
7000
9000
11000
13000
15000
NO OF PERSONS

Figure 7 8


TRIPOLI AGE PYRAMID 1964 CENSUS
ALIENS
MALES
FEMALES
OVER 75
65 74
55 64
45 54
40-44
35 39
30 34
25 29
20 24
15 19
10 14
5 9
1 4
UNDER 1
3000
1000
0
1000
3000
LIBYANS
MALES
FEMALES
OVER 75
65 74
55 64
45 54
40 44
35 39
30 34
25 29
20 24
15 19
10 14
5 9
1 4
UNDER 1
15000
13000
11000
9000
7000
5000
3000
1000
0
1000
3000
5000
7000
9000
11000
13000
NO OF PERSONS

growth may be due to better enumeration in this age group in 1964, but some must represent natural increase This had the effect of lowing the median age of the population and reducing the proportion of people in the economically active age group (15-64) from 61 5 per cent in 1954 to 52 8 per cent in 1964 (Table 7 16)

Table 7 16 shows a similar decline between the censuses in the proportion of old people In fact, as Tables 7 1 and 7 2 (Appendix III) show, both the age group 15-64 and the age group 65 years and over, experienced a large increase in numbers while declining in their relative significance within the total population largely due to the very large increase in the number of youngsters in Tripoli

Direct comparisons between sections of the population in the inter-censal period are complicated by enumeration errors, particularly in the 1954 census A comparison of age cohorts enumerated at both censuses bears out the fact that enumeration was better for some groups than others In the present study, a brief discussion of internal census comparisons will suffice

Age-specific sex ratios appear on Appendix III Tables 1 and 2, which show that there is a statistical deficiency of females, reflecting enumeration difficulties with women

In 1954, sex numbers were approximately equal in the 0-19 age groups, but a male surplus appeared between ages 20-39, due probably to differential enumeration plus some in-migration The expected female surplus in the upper age groups does not appear due to under-enumeration

In 1964, the pattern differs slightly, for while the sexes were equally proportioned between 0-14, a female surplus was apparent between ages 15-24 This may be due to the out-migration of young males to take employment in the oil and ancillary industries in Benghazi Between the ages 30-54, males again outnumbered females reflecting yet again the twin factors of female under-enumeration and some sex-selective in-migration Older women in 1964 outnumbered their male counterparts

Table 7 16 Age groups in Tripoli, 1954 and 1964 Censuses

	Age groups	1954 Census %	1964 Census %
1	Infant and adolescent (0-14 years)	30 0	43 2
2	Young adults (15-34 years)	37 6	32 1
3	Old adults (35-64 years)	23 9	20 7
4	Old people (65 and over)	4 5	3 8
5	Unidentified	-	0 2
	Total	100 0	100 0

Source Calculated from General Population Censuses, 1954 & 1964

This is a general phenomenon in all developing countries in Africa and Asia where infant and adolescent groups represent the highest percentages Libya in general and Tripoli in particular are no exception On the other hand, the percentages of young adults, old adults and old people declined between 1954 and 1964, despite in-migration

7 6 SEX RATIO

Libya as a whole has excess of males over females, owing to under-enumeration of women, and the nature of the society which favours male children and male adults

Table 7 17 Sex Ratio in four Libyan Censuses

Date of census	Males	Females	Deficiency of females	Males per thousand females
1931	341,984	312,732	29,252	1,092
1936	377,416	355,557	21,959	1,062
1954	540,364	501,235	39,129	1,081
1964	813,386	750,983	62,403	1,083

Source 1931, 1936, 1954 and 1964 Censuses

Tripoli is no exception, the number of males, as Table 7 17 shows, exceeds the number of females

Table 7 18 Sex Composition of Tripoli, 1954 and 1964 Censuses

Quarter	1954 Census			1964 Census		
	Males	Females	Males per 1,000 females	Males	Females	Males per 1,000 females
1 Belkheir	8,393	7,778	1,079	8,966	8,179	1,096
2 Bu Harida	1,536	1,468	1,046	2,708	2,355	1,149
3 Dahra	5,451	5,201	1,048	5,703	5,294	1,077
4 El Nuflein	1,309	1,179	1,110	2,289	1,876	1,220
5 Shara el Garbi	2,718	2,250	1,208	9,654	9,417	1,025
6 Shara el Kebir	3,530	3,266	2,080	8,234	7,378	1,116
7 Bab el Bahr	3,228	2,795	1,154	3,333	2,804	1,145
8 Gargaresh	1,370	1,230	1,111	7,617	7,669	993
9 Kura el Baladia (Shanty Town)	11,105	7,955	1,395	13,238	12,104	1,093
10 Homet Garian	4,024	3,728	1,079	3,547	3,217	1,102
11 Mahallet el Baladia	3,159	2,373	1,331	2,729	2,216	1,231
12 Mizran	6,263	6,510	962	6,327	6,193	1,021
13 Kushat el Suffar	2,742	2,757	994	2,588	2,421	1,068
14 Shara el Bay	2,118	2,006	1,055	3,690	3,288	1,122
15 Shara el Srim	2,321	2,076	1,118	5,319	4,823	1,102
16 Shara el Shatt	452	350	1,158	637	565	971
17 Shara el Zawia	3,029	2,758	1,098	7,912	7,175	1,102
18 Shara Ben Ashur	3,921	3,654	1,073	13,187	12,314	1,070
19 Zawiet el Dahmani	2,131	2,062	1,033	3,377	3,072	1,099
Total	68,817	61,421	1,120	111,055	102,451	1,083

Source General Population Censuses, 1954 and 1964

In 1954 there were only two quarters (Mizran and Kushat el Suffar) with an excess of females (see Table 7 18), due in part to the relatively high concentration of Italians, but by 1964 the situation had been changed so that Gargaresh and Shara el Shatt were the only two quarters with a female surplus and they are partly rural in character In 1964 the highest surplus of males occurred in Bu Harida, El Nuflein, Shara el Kebir, Bab el Bahr, Homet Garian, Mahallet el Baladia, Shara el Bay, Shara el Srim and Shara el Zawia Obviously, rural migration is one of the factors in this respect

7 7 MARITAL STATUS

Table 7 19 Marital Status in Tripoli, 1954 and 1964 Censuses

	1954 Census		1964 Census	
	No of persons aged 15 years and over	Percentage	No of persons aged 15 years and over	Percentage
Single	13,724	18 0	19,084	16 8
Married	51,346	67 4	81,737	71 9
Divorced	3,161	4 1	2,939	2 6
Widowed	7,122	9 4	8,229	7 2
Unidentified	812	1 1	1,657	1 5
Total	76,165	100 0	113,646	100 0

Source General Population Census, 1954 and 1964

Table 7 19 reveals that the percentage of single persons was higher in 1954 than in 1964 This may be due to the lack of jobs at the time, a factor which created difficulty for young adult males to marry On the other hand, some of the young adults were at school

The percentage of married persons was higher in 1964 This is attributed to the higher rate of marriage between 1954 and 1964 as a result of the improvement of the standard of living and availability of employment

The highest incidence of marriage recorded recently was in 1965 Excluding 1957 and 1967 which experienced a decline in the incidence of marriage due either to failure in reporting on the part of the married people or error in registration, the figures revealed a rise in incidence of marriages with some fluctuation in some years

Table 7 20 Marriages and Divorces in Tripoli, 1953-1967

Year	Marriages (Libyan)			Marriages (Italian)			Divorces (Libyans)		
	No of marri-ages	Average per month	Marriages per 1,000 people	No of marri-ages	Average per month	Marriages per 1,000 people	No of divor-ces	Average per month	Divorces per 1,000 people
1953	1,043	86 9	9 7	308	25 6	9 7	232	19 3	2 2
1954	1,032	86 0	8 9	287	23 9	6 7	262	30 1	2 3
1955	1,080	90 0	9 1	284	23 6	9 3	305	25 4	2 6
1956	1,026	85 5	8 3	285	23 7	9 5	256	21 3	2 1
1957	960	80 0	7 4	287	23 9	9 4	271	22 5	2 1
1958	1,037	86 4	7 7	335	27 9	10 9	281	23 4	0 6
1959	1,202	100 1	8 6	294	24 5	9 7	310	25 8	2 2
1960	1,127	93 9	7 7	257	21 4	8 7	352	29 3	2 4
1961	1,053	87 7	6 8	268	22 3	9 7	352	29 3	2 2
1962	1,129	94 0	6 9	241	20 0	8 9	258	21 5	1 6
1963	1,082	90 1	6 3	179	14 9	6 7	353	29 4	2 1
1964	1,129	94 0	6 3	190	15 8	7 2	341	28 4	1 9
1965	1,422	118 5	7 5	112	9 3	4 2	358	29,8	1 9
1966	1,377	114 7	6 9	124	10 3	4 7	415	34 5	2 1
1967	947	78 9	4 5	246	20 5	9 7	246	20 5	1 2

Source Municipality of Tripoli, Statistical Dept , 1968

The highest crude marriage rate (9 7 per thousand) for Libyans recorded was in 1953 This was primarily related to the impact of Independence, availability of jobs and improvement in the standard of living Crude marriage figures between 1954-1967 fluctuated considerably, probably because of inaccuracy in registration on the part of the Municipality of Tripoli The mean crude marriage rate for 15 years is 7 5 per thousand, Benghazi's is estimated to be 6 9 per thousand [34] The Italians have a similar mean crude marriage rate (see Table 7 20) to the Libyans for the 15 years 1953-1967

It is interesting to note that most marriages take place during the summer when women and men can take advantage of warm weather to celebrate the marriage This habit of summer marriage may have originated from the rural areas Marriage incidence is rising among the young adult groups but early marriage may be delayed by education and availability of work At present, young adults tend to marry when they are between 25 and 30

Polygamy is still found in Tripoli In 1954 there were 26,308 married males of whom (98 6 per cent) were married with one wife People with more than one wife therefore represented only 1 4 per cent [35] In 1964 the number of persons married with one wife was 65,435 male persons, or 98 0 per cent of married males (66,733), the rest had more than one wife [36]

There is therefore only a small increase in the figures for polygamy between 1954-1967 from 347 to 1,298 males Rural in-migrants, with a tendency to possess more than one wife, bring their wives to the city, or perhaps among the wealthy in-migrants, re-marry another wife in Tripoli

In 1954 there were 3,161 divorced women,[37] but by 1964 the number had declined to 2,939 [38] Divorce rates are higher among the rural in-migrants who have settled in Tripoli recently because of the rural background which makes divorce easier for social and economic reasons Divorce is more difficult for the urban upper and middle classes The monthly average number of divorces between 1954 and 1967 varied considerably, the highest figure being recorded in 1966 and the lowest in 1967 (see Table 7 20)

Absence of figures on crude divorce for the rural areas of Tripolitania does not enable the researcher to make a sound comparison between the rural and urban areas for a considerable period of years However, the available figures of divorces for the Jebel el Akhdar and Derna Muqataas in Cyrenaica in 1966 show that they are 2 4 and 2 5 per thousand respectively,[39] the highest crude divorce rates in Libya This reflects the impact of the rural life and social system which encourage the man to divorce his wife easily

The number of widowed persons is high and rose from 7,122 in 1954 to 8,229, of whom the widows formed 5,885 and 6,960 respectively [40] One explanation of this is the tendency of older men to marry younger wives and hence to die before their wives A further reason may possibly be the higher casualty rate for men in road accidents

7 8 THE ECONOMIC COMPOSITION

Owing to the fact that there are no available data on the economic composition of the city, the following study is based on the economic composition of the Muqataa of Tripoli which in 1964 had 379,925 inhabitants of which the population of Tripoli city represented 55 2 per cent The Muqataa consists very largely of the city and its immediate tributary area

Industrial Composition

The total working population of the Muqataa of Tripoli was 96,269 persons of whom 84,328 were Libyans, or 87 6 per cent, and the rest (11,941 or 12 4 per cent) aliens [41] The working population constituted 26 3 per cent of the total number of the population of the Muqataa (379,925) Males represented 96 1 per cent of the Libyan active population, and females only 3 9 per cent, 79 8 per cent of the alien population were males,[42] so alien females were employed more than their Libyan counterparts (Fig 7 9)

Figure 7 9

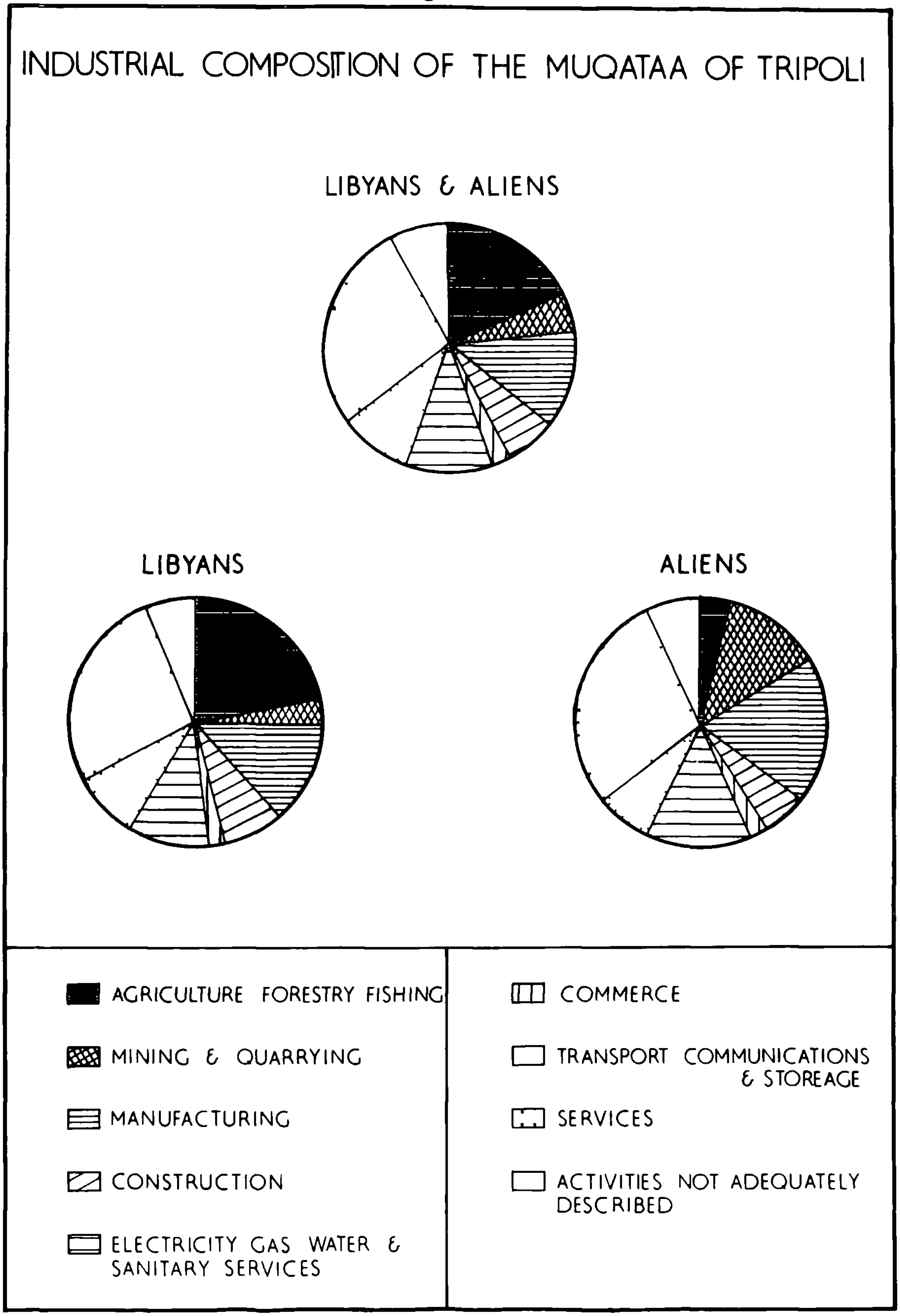

INDUSTRIAL COMPOSITION OF THE MUQATAA OF TRIPOLI
LIBYANS & ALIENS
LIBYANS
ALIENS
AGRICULTURE FORESTRY FISHING
MINING & QUARRYING
MANUFACTURING
CONSTRUCTION
ELECTRICITY GAS WATER & SANITARY SERVICES
COMMERCE
TRANSPORT COMMUNICATIONS & STOREAGE
SERVICES
ACTIVITIES NOT ADEQUATELY DESCRIBED

Table 7 21 Active Population in Tripoli Muqataa, 1964

Division	Libyans				Aliens				Total			
	M	F	Total	%	M	F	Total	%	M	F	Total	%
Agriculture, Forestry, Hunting & Fishing	16,563	414	16,977	21 3	385	17	404	3 4	16,948	431	17,379	18 1
Quarrying	3,207	36	3,243	3 8	1,250	268	1,518	12 8	4,457	304	4,761	4 9
Manufacture	8,065	277	8,343	9 9	2,129	116	2,245	18 7	10,194	393	10,587	10 9
Construction	7,153	42	7,195	8 4	687	21	708	5 9	7,840	63	7,903	8 2
Electricity, Gas, Water & Sanitary Services	1,807	41	1,848	2 2	314	22	336	2 7	2,121	63	2,184	2 2
Commerce	8,659	92	8,751	10 4	1,222	386	1,618	13 4	9,892	478	10,370	10 8
Transport, Communications & Storage	7,849	62	7,911	9 4	836	71	907	7 5	8,685	133	8,818	9 2
Services	21,215	1,965	23,180	26 4	2,262	1,253	3,515	29 8	23,477	3,218	26,695	27 8
Activities not adequately described	6,576	305	6,881	8 4	440	250	690	5 8	7,017	555	7,572	7 9
Total	81,094	3,234	84,328	100 0	9,537	2,404	11,941	100 0	90,631	5,638	96,269	100 0

Source General Population Census, 1964, Muqataa of Tripoli, Tripoli, 1967, p 16

It appears from Table 7 21 that the highest percentages of the active Libyan population were in services and agriculture Service activities were highly concentrated in Tripoli city, whereas agricultural activities were found outside People working in commerce, manufacture, transportation and construction had similar percentages Thus 78 7 per cent of the active Libyan population were employed in secondary and tertiary activities representing 24 3 and 54 4 per cent respectively

A high percentage of the alien active population worked in manufacturing and services, followed by quarrying and commerce, and then transportation and construction activities

Economic Status (Table 7 22)

The number and percentages of the active population in Tripoli Muqataa, 1964, by economic status, are as follows

Table 7 22 Economic Status of the active population in Tripoli Mugataa, 1964

	Libyans				Aliens				Total			
	M	F	Total	%	M	F	Total	%	M	F	Total	%
Employers	1,083	-	1,083	1 3	414	16	430	3 60	1,497	16	1,513	1 6
Own account workers	19,068	229	19,297	22 9	1,378	125	1,503	12 60	20,446	354	20,080	20 9
Employees	54,884	2,398	57,278	67 9	7,446	2,040	9,486	79 44	62,330	4,438	66,768	69 4
Unpaid family workers	1,726	403	2,129	2 5	98	69	167	1 39	1,824	472	2,296	2 4
Other family workers	136	11	147	2	2	20	22	0 18	138	31	169	0 8
Seeking work	4,145	176	4,321	5 2	109	31	140	1 17	4,254	207	4,461	4 6
Not stated	52	17	69	0 0	90	103	193	1 61	142	120	262	0 3
	81,094	3,234	84,328	100 0	9,537	2,404	11,941	100 00	90,631	5,638	96,269	100 0

Source General Population Census 1964, Mugataa of Tripoli, Tripoli, 1967, pp 24-25

In Table 7 22 it is obvious that the Libyan employees formed the most numerous group (67 9 per cent) For the whole of Libya the number of employees was 192,374 in 1964,(43) of which Tripoli constituted 29 7 per cent

People seeking work in 1964 represented 5 2 per cent of the total They formed only 12 6 of the total number of people seeking work in Libya as a whole (33,594) in 1964 (44) This percentage was slightly lower than at Benghazi In general, the unemployment has declined in recent years due to an abundance of work in industry, Government departments, oil companies etc Most people seeking work did not accept any job offered to them through the Labour Office of the Ministry of Labour and Social Affairs, many insisted on easy jobs such as porters in Government offices or schools

The alien active population had slightly different percentages in their economic status For example, the percentage of employees (1 6 per cent) was higher than among the Libyan active population This was related to the economic role played by Italians in Tripoli The percentages of employees (69 4 per cent) was also higher than Libyans, but there were less people seeking work

7 9 <u>URBAN DENSITIES</u>

Libya is considered one of the most sparsely populated countries in the world Population density was 0 62 persons per square kilometre in 1954, and rose to 0 80 persons in 1964 Tripolitania's was only slightly higher 2 91 persons per square kilometre in 1954, and 4 14 in 1964

Tripoli as the largest urban centre had a population density of 37 7 persons per hectare in 1954, which increased to 61 6 persons in 1964, (377 and 616 per square kilometre respectively) If we exclude the non-residential uses (industry, commerce, agricultural areas, open spaces, communications (main roads) and cemeteries), the average urban density becomes 137 persons per hectare (1,370 persons per square kilometre)

Table 7 23 Population Density in Tripoli, 1954, 1964 and 1979

Quarter	Area per hectare	Population density per hectare		Population in 1979 (est)	Population density per hectare
		1954	1964		
Belkheir	67 9	238 1	255 3	18,052	265 8
Bu Harida	62 5	48 0	80 0	7,717	123 4
Dahra	64 0	166 4	167 8	11,290	176 4
El Nuflein	174 5	14 2	23 9	7,227	41 4
Shara el Garbi	717 4	6 9	26 5	27,058	37 7
Shara el Kebir	171 8	39 5	90 9	25,303	147 2
Bab el Bahr	8 1	743 5	756 1	6,125	756 1
Gargaresh	826 6	3 1	18 1	38,881	47 0
Kura el Baladia (Shanty Town)	170 5	111 7	145 9	40,773	239 1
Homet Garian	6 8	1140 0	922 8	6,751	992 7
Mahallet el Baladia	11 0	502 9	452 1	4,974	452 1
Mizran	51 2	249 4	243 3	12,461	243 3
Kushat el Suffar	6 8	808 6	730 8	4,970	730 8
Shara el Bay	43 0	95 9	160 8	10,158	236 2
Shara el Srim	212 3	20 7	47 4	10,681	50 3
Shara el Shatt	40 8	21 6	32 0	1,444	35 3
Shara el Zawia	267 0	21 6	56 0	29,621	110 9
Shara Ben Ashur	457 5	16 5	55 8	57,780	126 9
Zawiet el Dahmani	87 1	48 1	75 0	7,810	89 6
Total	3,446 8	Average 37 8	Average 61 6	328,676	Average 95 3

Source Municipality of Tripoli & Public School Study for Tripoli and the Metropolitan area, Tripoli, 1966, p 94, and Field Work Study

In 1954, the highest residential densities were in the four quarters of the Old Town (see Table 7 23), where the urban density was 500-1,200 persons per hectare The lowest densities were in nine residential quarters, where there were under 50 persons per hectare (Fig 7 10)

By 1964, some increase in urban densities had taken place within the new residential quarters of the middle and outer zones of Tripoli, whereas the inner and central business district maintained the same densities in both censuses of 1954 and 1964 (Fig 7 11)

High population densities recorded in both censuses for the Old Town were primarily related to the concentration of cheaper accommodation and shared dwellings in this part of the city Low income groups were highly concentrated in this area Similarly, high densities were recorded for two residential quarters within the central business district, where cheaper accommodation was available in Libyan traditional houses

Other quarters of Tripoli in the middle and outer city zones, had generally lower population densities Such areas were being newly built at low densities for occupation by middle and upper class families

The estimated pattern of population densities in Tripoli in 1979 is rather similar to their present day densities For example, the Old Town's quarters will maintain the same urban densities owing to the limited number of dwellings Belkheir, Mizran, as well as the Shanty Town and Shara el Bay, will have

Figure 7 10

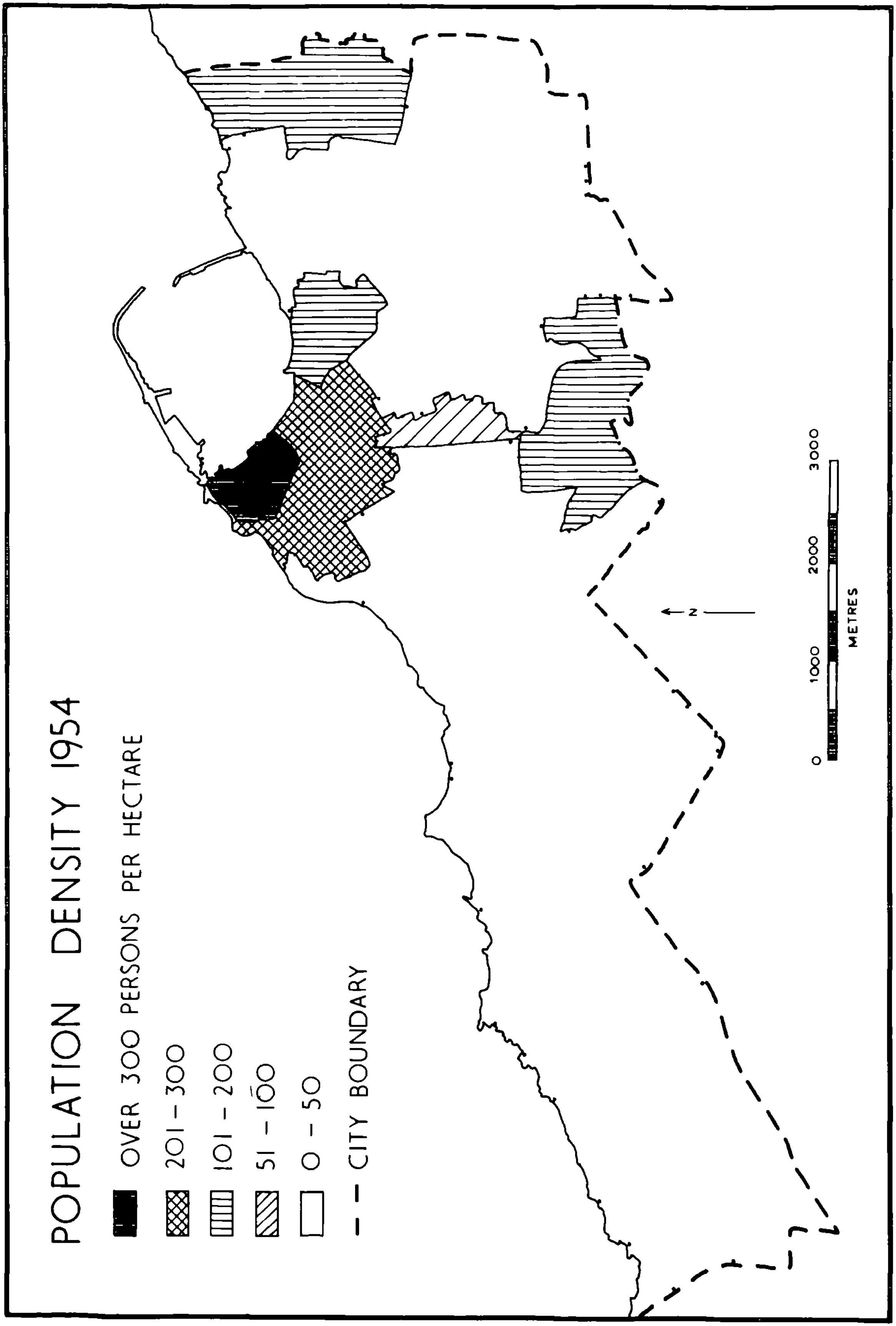
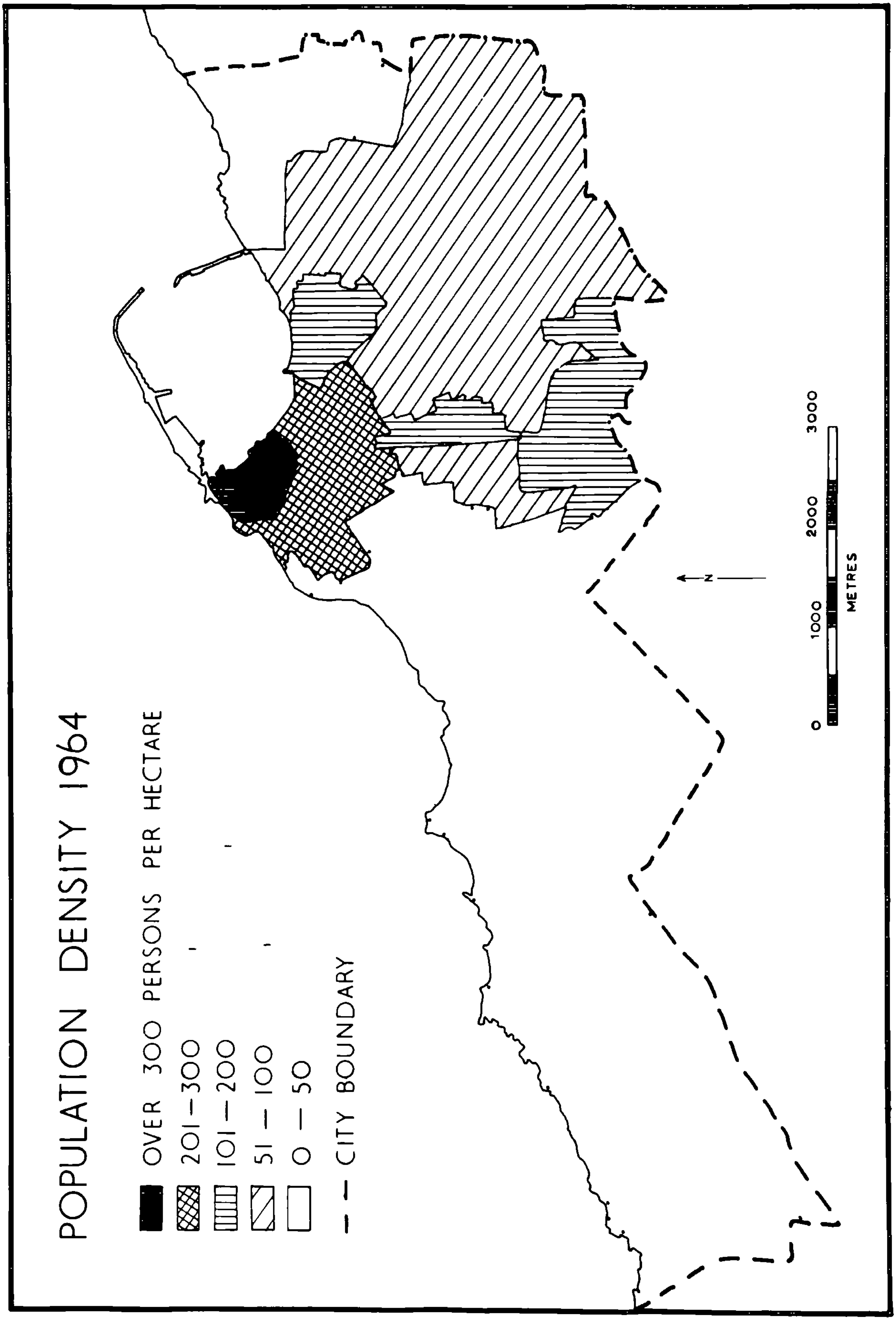

POPULATION DENSITY 1954
OVER 300 PERSONS PER HECTARE
201 - 300
101 - 200
51 - 100
0 - 50
CITY BOUNDARY
N
0
1000
2000
3000
METRES

Figure 7 11


POPULATION DENSITY 1964
OVER 300 PERSONS PER HECTARE
201—300
101—200
51—100
0—50
CITY BOUNDARY
N
0
1000
2000
3000
METRES

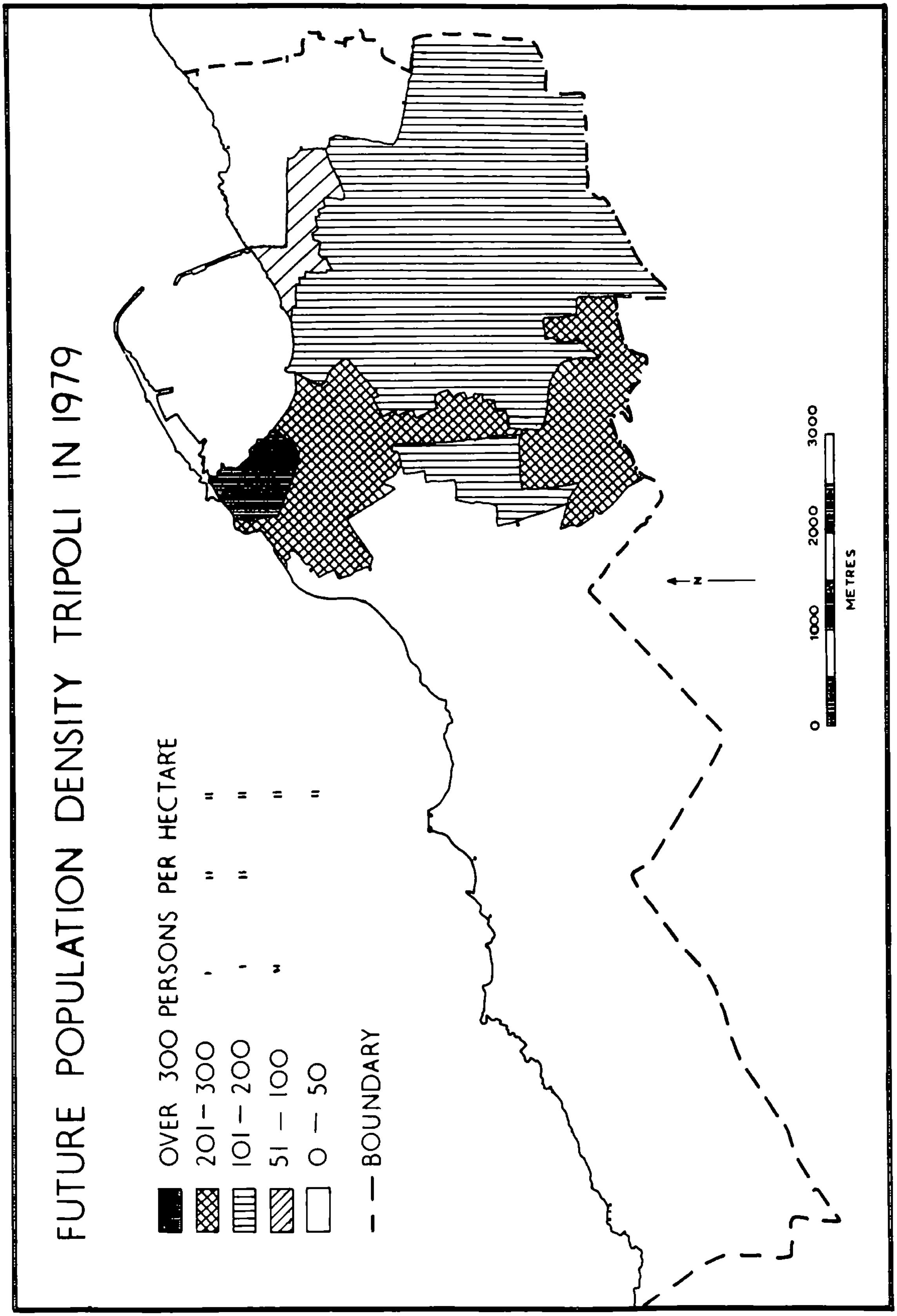
urban densities of between 201-300 persons per hectare Bu Harida, Dahra, Shara el Kebir, Shara el Zawia and Ben Ashur will have urban densities of about 101-200 persons per hectare (medium density) Zawiet el Dahmani will have a low density of 90 persons per hectare, whereas the rest of the quarters will have only a very low density of less than 50 persons per hectare (Fig 7 12)

Some quarters of Tripoli will experience an increase in population densities in the next ten years Nevertheless, this increase of urban densities will not be high if compared with the urban densities of some North African cities such as Algiers (8,000 inhabitants per hectare in the Casbah, and some Asian cities, for example, in the heart of Singapore 3,114 people per hectare) (45)

Conclusion

We have seen that Tripoli has experienced a rapid growth of population between 1954-1964 owing to natural increase, rural in-migration and return of Libyans from Tunisia The city has really doubled its population in one decade This has resulted in an increase in the number of working population, particularly in the secondary and tertiary activities It has also resulted in rising population densities within the inner zone, central business district and Shanty Town Therefore, the population growth of the city will increase the pressure on the agricultural lands within the city, a factor which will lead to the disappearance of green belts around the city and the emergence of new built-up areas

Figure 7 12



FUTURE POPULATION DENSITY TRIPOLI IN 1979
OVER 300 PERSONS PER HECTARE
201 – 300 " " "
101 – 200 " " "
51 – 100 " "
0 – 50 "
BOUNDARY
N
0
1000
2000
3000
METRES

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CHAPTER VIII

URBAN ZONES

The urban zones of present-day Tripoli are a consequence of historical growth which took place during the Arab, Ottoman, Italian and post-independence eras, which have affected the pattern of land use and the functions of the city Political and socio-economic forces were important in changing the characteristics and the urban functions of the various zones Thus each zone is characterized by certain land uses and functions reflecting the post and present urban forces operating within the zone Owing to the significant role of the changing pattern of land uses in shaping the urban zones of Tripoli, it is of crucial importance to examine the land use between 1911-1967, when the most significant changes in urban land use took place, leading to the emergence of characteristic urban zones - such as the central business district, the middle zone and the outer zone The inner zone was the only one to have been developed before 1911 as a result of the historical growth which took place from the Phoenician area e a until the end of the 19th century In short, these urban zones are products of both historical and contemporary urban development within the city

8 1 LAND USE

The land use of Tripoli has changed tremendously during the last 57 years The impact of the Italian colonization was very great Here the Italians converted the land use of the city from rural agricultural land of the Menshia to a built-up area The new urban development took over all the Arab farms and gardens around the Old Town to the south and west A new modern sector with multi-storey buildings, together with roads, streets and shops was created This new built-up area has covered all the central business district and some parts of the middle zone

After Independence (1951), oil exploration and discoveries, another drastic change in land use of the city took place Here new dwellings were erected in various parts of the middle and outer zones, and new industrial areas emerged All these new urban land uses have absorbed extensive areas of the agricultural lands of Tripoli

The total area of Tripoli is 3,446 8 hectares It can be divided into two types of lands developed and under-developed lands The former occupies an area of 2,066 3 hectares or 529 per cent and the latter forms the rest The developed land can be subdivided into various land uses(1) (Fig 8 1)

Figure 8 1

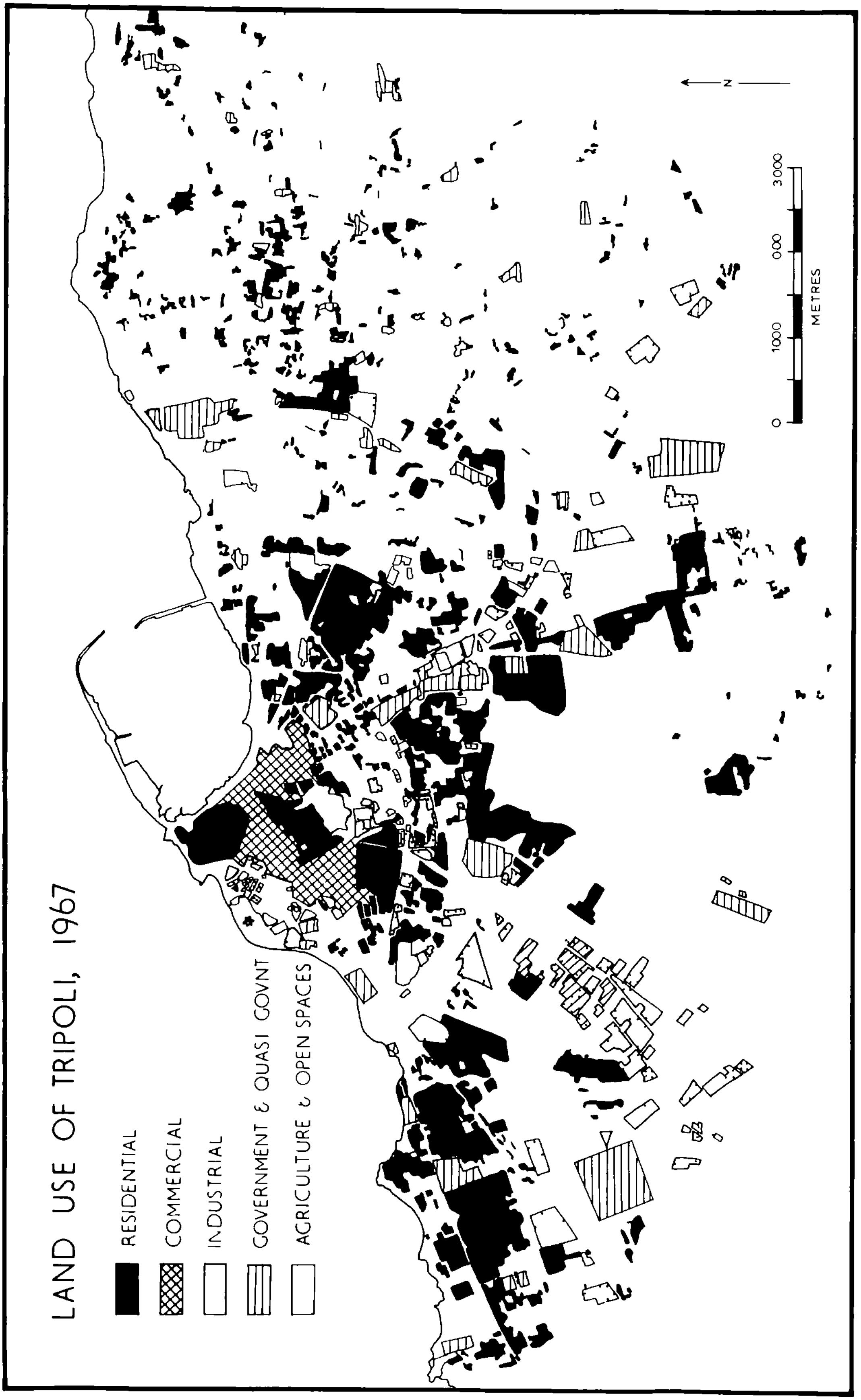

LAND USE OF TRIPOLI, 1967
RESIDENTIAL
COMMERCIAL
INDUSTRIAL
GOVERNMENT & QUASI GOVNT
AGRICULTURE & OPEN SPACES
N
METRES
0
1000
3000

Table 8.1 Land uses of Tripoli, 1967-1968 See page 306

Type of land use	Area in hectares
Residential	668.4
Commercial	199 7
Industry	264 6
Government and Quasi Government	297 4
Agriculture	636 2
Total	2,066 3

1 Residential use

The residential use of Tripoli constitutes 19.4 per cent of the total area About half of the residential areas emerged after Independence and oil discoveries This was primarily due to the increasing demand for accommodation on the part of foreign and rural migiants as well as newly married couples These three factors have enhanced the growth of the residential areas, particularly within the middle and outer zones

2 Commercial use

The commercial land occupied by retailing, wholesaling and offices is 5 8 per cent of the total Most of this is concentrated within the central business district Other small commercial centres catering for daily requirements are found within the residential areas of Tripoli The growth of the commercial use is associated with the growth of population and improvement of standard of living, which meant an increasing demand for goods

3 Industrial use

The industrial land use of Tripoli has developed recently or since 1951 This is primarily due to the flow of foreign capital and the investment by many Libyan businessmen of their money in industry These two factors, together with availability of raw materials and the local demand for goods, as well as encouragement of the Central Libyan Government of industrial investment, have contributed enormously to the development and expansion of the industrial land use within the middle and outer zones of Tripoli The industrial land use constitutes 7 7 per cent of the total

4 Government and Quasi Government uses

The Government and Quasi-public land uses form 8 6 per cent of the total area These land uses comprise various Government buildings such as ministries, police stations, hospitals, dispensaries, as well as semi-public buildings such as mosques Most of these land uses are highly concentrated in the middle zone and central business district (Figs 8 2 and 3

5 Agricultural use

The agricultural land use of Tripoli is also important because the agricultural land supplies the city with fruit, vegetables, milk and eggs It constitutes 18 4 per cent of the total area About 80 per cent of the agricultural land is found within the eastern part of the middle zone, the rest is located within the western part of the outer zone in Gargaresh and Gurgi Until 10 years ago agricultural land occupied the

Figure 8 2

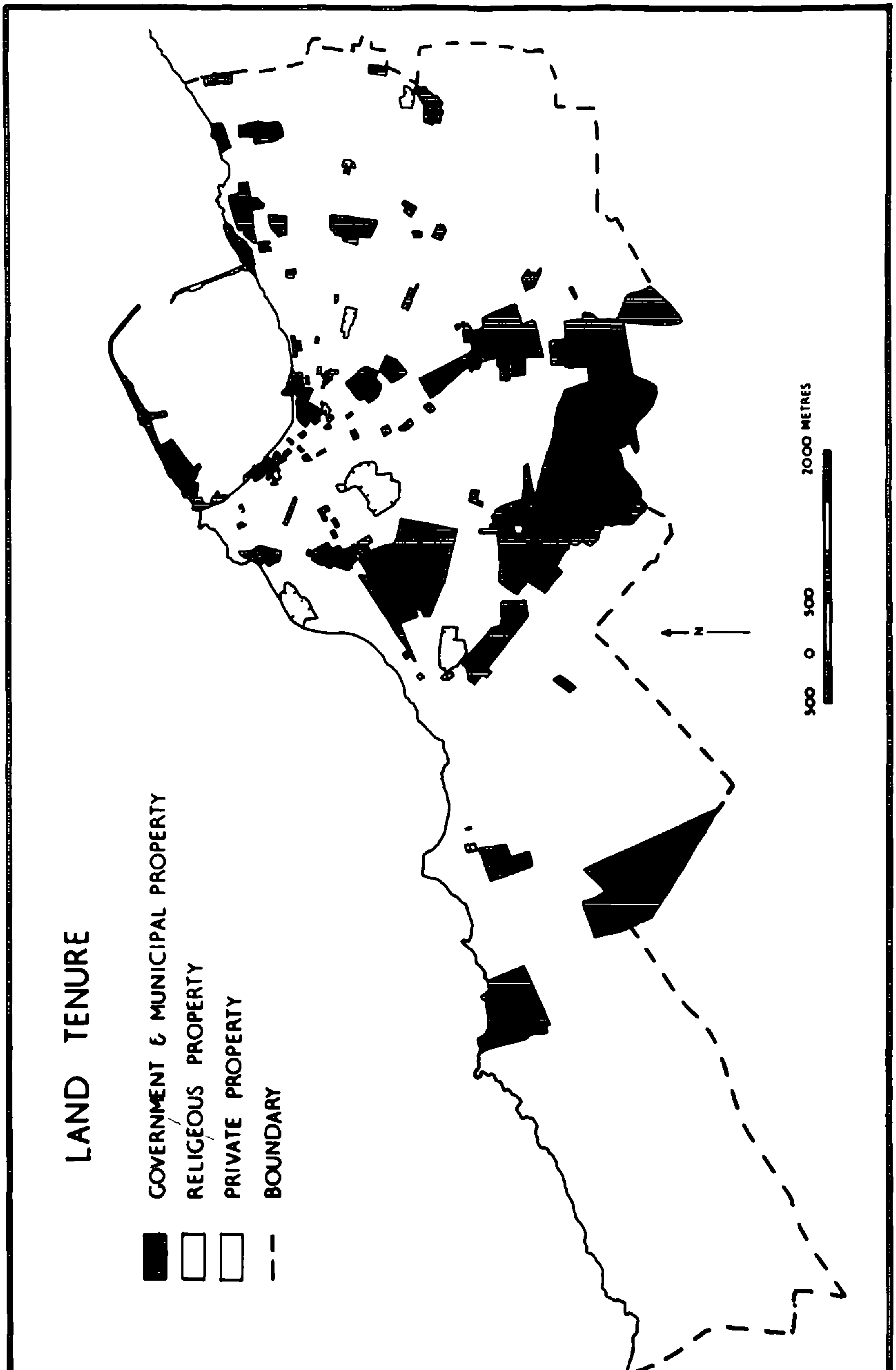
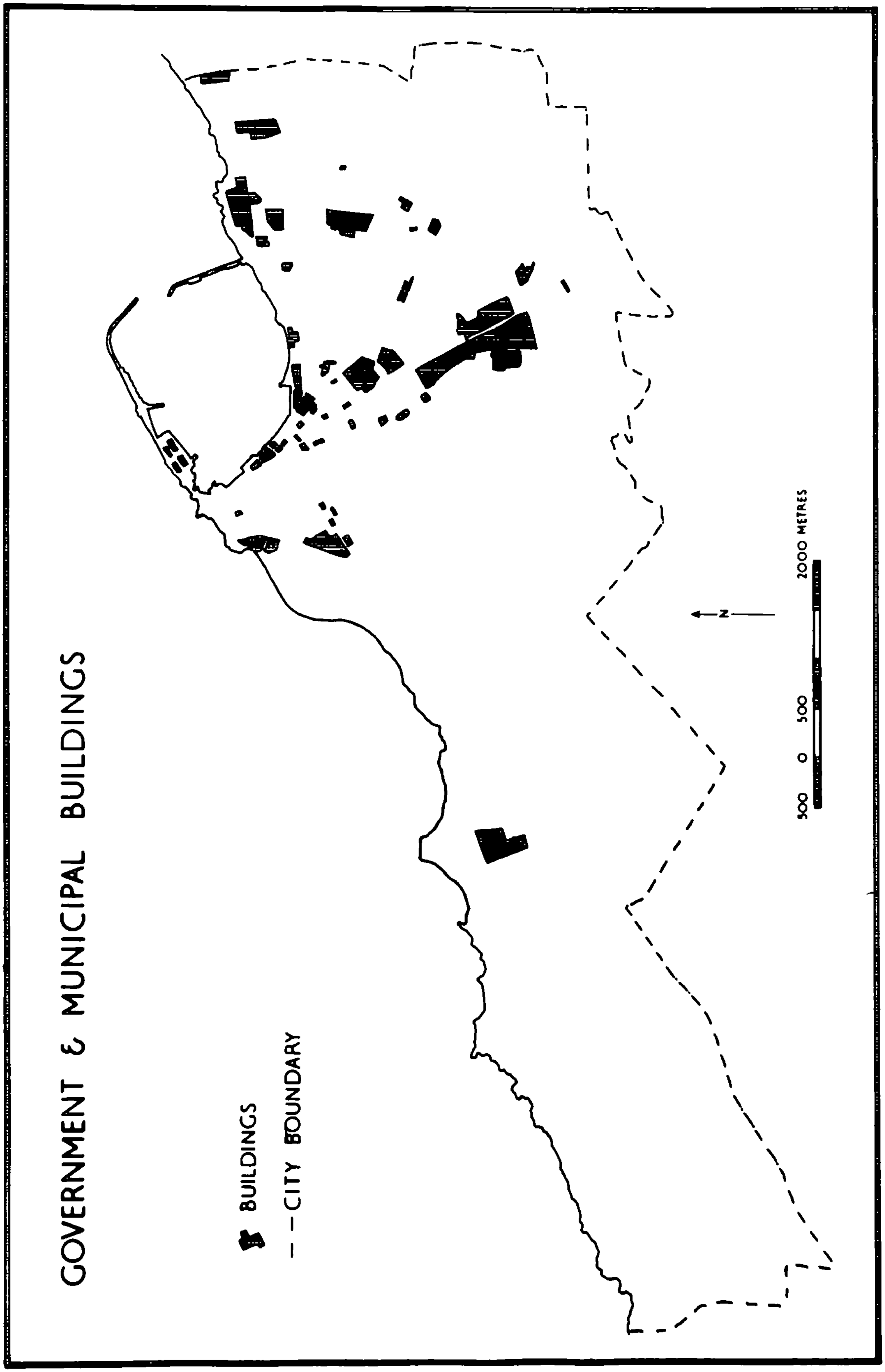

LAND TENURE
GOVERNMENT & MUNICIPAL PROPERTY
RELIGEOUS PROPERTY
PRIVATE PROPERTY
BOUNDARY
500 0 500 2000 METRES
N

Figure 8 3


GOVERNMENT & MUNICIPAL BUILDINGS
BUILDINGS
CITY BOUNDARY
N
2000 METRES
500 0 500

whole western part of the outer zone to the west of the Wadi Mejenin Here the agricultural land was owned by Italian landlords who sold their farms to land speculators who subsequently converted them to urban uses Agricultural land within the eastern part of the middle zone was less subject to land speculation This was due to the fact that most Libyan owners resisted selling their farms to the land speculators Other reasons are also important, e g the nature of inheritance in Islam (in many cases the farm is owned by several individuals) and the new Government regulations of 1968 concerning the conservation of agricultural lands

Agricultural lands fall into two types the irrigated lands account for 511 hectares and non-irrigated lands occupy an area of 125 hectares The former are found within the whole eastern middle zone of Tripoli and a part of Gargaresh, whereas the non-irrigated lands are concentrated in the Gurgi area in the ex-Italian farms Both types of agricultural land contribute to the economy of the city

The 1960 Census of Agriculture recorded a farm population of 5,778 of which 1,298 were 15 years of age or older and actively engaged in agriculture, this section of the population supported itself on 823 holdings, totalling 1,367 hectares in 1960 (excluding land worked by four corporations) giving an average lot area of 1 66 hectares which is surprisingly high in the urban area of Tripoli (2)

In 1960 the city had 905,400 trees of different kinds, of which 788,000 were productive (87 1 per cent) Vines, citrus, olives, and dates were predominant (Appendix IV) [3]

Table 8 2 Distribution of Crops Grown in Tripoli, 1960[4]

Kind of crop	No of hectares
Grain	47
Vegetables	135
Groundnuts	8
Tobacco	35
Fodder	121
Total	346

As for crops (see Table 8 2) the emphasis was very markedly on vegetables and fodder crops for the city's market and for private consumption and household use

Table 8 3 Number of animals in Tripoli, 1960[5]

Sheep	1,006
Goats	128
Cattle	1,314
Camels	102
Horses	145
Donkeys	334
Poultry	836
Total	3,865

In addition, a substantial number of animals (Table 8 3) were still found within the agricultural land of the middle zones of Tripoli

6 Vacant land

This form of land constitutes 1,380 5 hectares or 40 1 per cent of the total Most vacant land is found within the southern part of Tripoli along the Wadi Mejenin course, where the land is owned by the Government and the Municipality of Tripoli Other vacant land or open spaces lie to the west of Tripoli in Gurgi and Gargaresh Most of these open spaces are owned by private landlords, the rest is public property

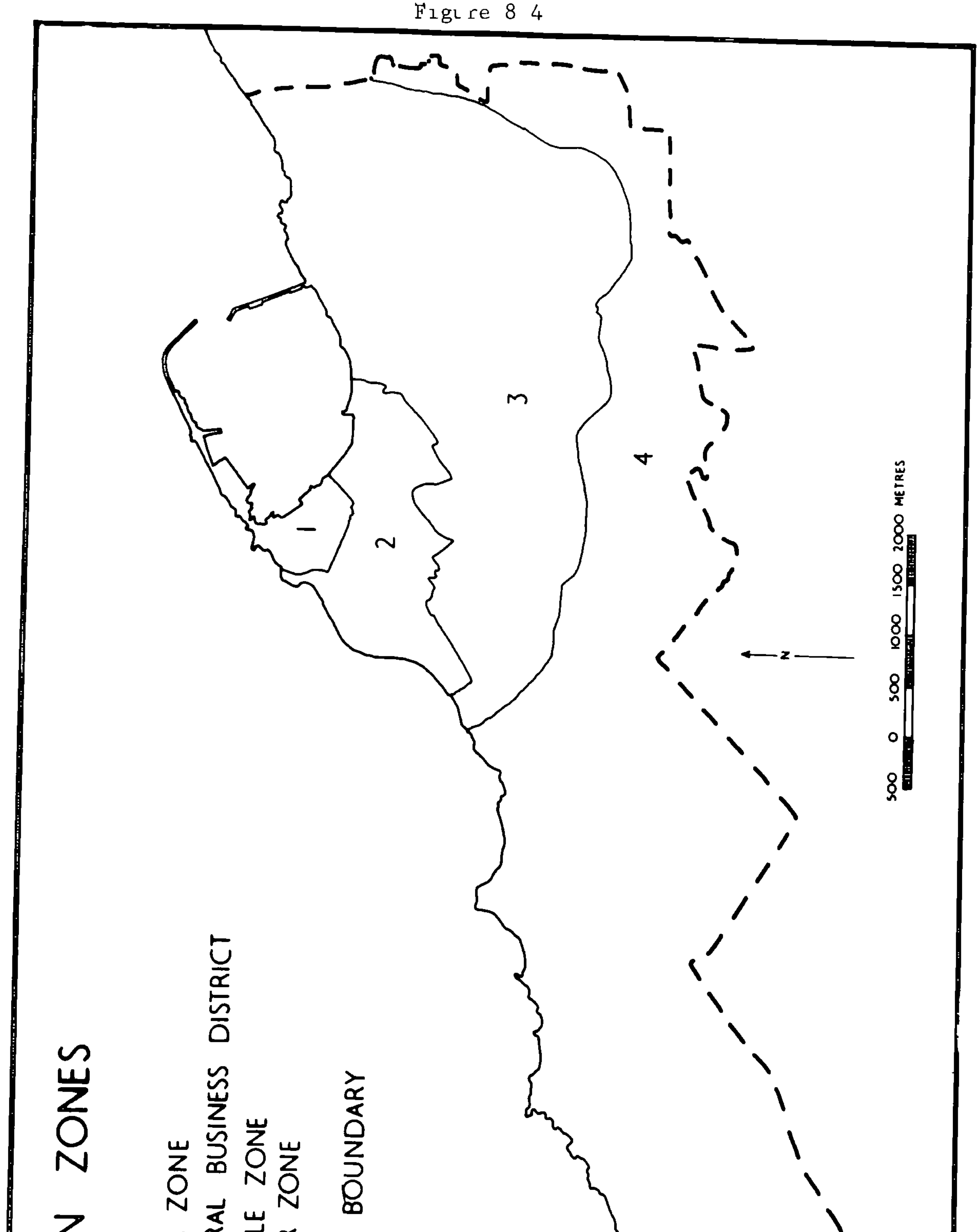
8.2 URBAN ZONES OF TRIPOLI

Classification and zoning are based entirely on the writer's field work and personal observations on the urban development of the city, particularly during the Italian rule and the post-Independence era During this period certain urban forces resulted in the emergence of the central business district, the middle zone and outer zones (Fig 8 4) Centralization has created the central business district, whereas the deconcentration and decentralization have established the middle and outer zones respectively

Inner zone

The Old Town occupies the inner zone covering an area of 32 8 hectares or 0 9 per cent of the total area It is generally a zone of decay because it is the most ancient part of Tripoli, being developed since Phoenician times, and it completed its urban development by 1911 (see Chapter 2) In non-port cities the inner zone is generally centrally located in the middle of the city, but in Tripoli the location of the inner zone is to the north of the city near the port area The urban functions of the inner zone combine both commercial, industrial and residential uses

Figure 8 4


URBAN ZONES
1 INNER ZONE
2 CENTRAL BUSINESS DISTRICT
3 MIDDLE ZONE
4 OUTER ZONE
CITY BOUNDARY
1
2
3
4
N
500 0 500 1000 1500 2000 METRES

The commercial function is the most important Here the traditional shopping area occupies all the southern and south-eastern parts of the zone, and includes various commercial activities such as the sale of barracans, textiles, gold and silver

The industrial function is primarily associated with the traditional shopping area Here all kinds of traditional workshops are to be found, specializing in various kinds of Libyan handicrafts such as leather, copper, fancy goods and carpets There is only one modern textile factory in the inner zone The existence of these traditional industries began with Arab rule, flourished during the Turkish administration, declined during the Italian rule and flourished again after Independence, owing to tourism and the increasing demand for handicraft goods on the part of local and foreign communities in Tripoli

The residential function of the inner zone is also of great importance There are four residential quarters, located within this inner zone, i e Mahallet el Baladia, Kushat el Suffar, Homet Garian and Bab el Bahr These four quarters contain 2,492 dwellings, accommodating 22,820 inhabitants The urban density within the inner zone is 687,8 persons per hectare This is the highest urban density in Tripoli as a whole, and may be principally attributed to the fact that the inner zone is an area of low-income groups who are attracted to this area by cheaper accommodation Thus the residential quarters are congested with poor families of rural origin

Apart from the commercial, industrial and residential functions of the inner zone, it has also an administrative function, Tripoli Castle is situated to the south-east of the Old Town, accommodating various governmental departments attached to the Ministry of Tourism and Archaeology, and the Ministry of the Interior (State Security Police) The castle also contains various national and natural museums

The inner zone has other administrative functions, such as the Central Bank of Libya which is situated to the north of the castle, and the Police Station The port of Tripoli is situated to the north-east of the Old Town

It is interesting to note that the inner zone has considerable religious significance owing to the presence of numerous mosques (30) and two churches The existence of these religious institutions goes back to the periods of the Arab and Turkish rule in Libya (Fig 2 2)

Central Business District

This zone is situated immediately to the south and west of the inner zone It is bounded on the south by the middle zone Therefore the central business district is located between two urban zones, occupying an area of 119 1 hectares or 3 5 per cent of the total area About 90 per cent of the central business district was built during the Italian rule in Libya The rest was built from 1951 onwards Some parts of the central business district have been re-developed since 1962 and are now occupied by multi-storey buildings

Plate 8.1 The eastern part of the central business district

Plate 8.2 The western part of the central business district and a part of the western residential areas of the Old Town

Rent is very high in the new multi-storey buildings For instance, the rent in the Shara 24 December Street is £L 70–80 per month on average for a large shop, whereas the shop rent in Khrebish multi-storey buildings is £L 190 per month on average In Baghdad Street it is £L 120–150 per month, while the rent in Istiqlal Street is the highest, ranging from £L 250 to £L 350 per month for a floor area of 50–75 square metres Rents for offices range from £L 100 to £L 150 per month in Khrebish's multi-storey building Elsewhere the rent is higher This high rent in general reflects the commercial and business values of the central business district

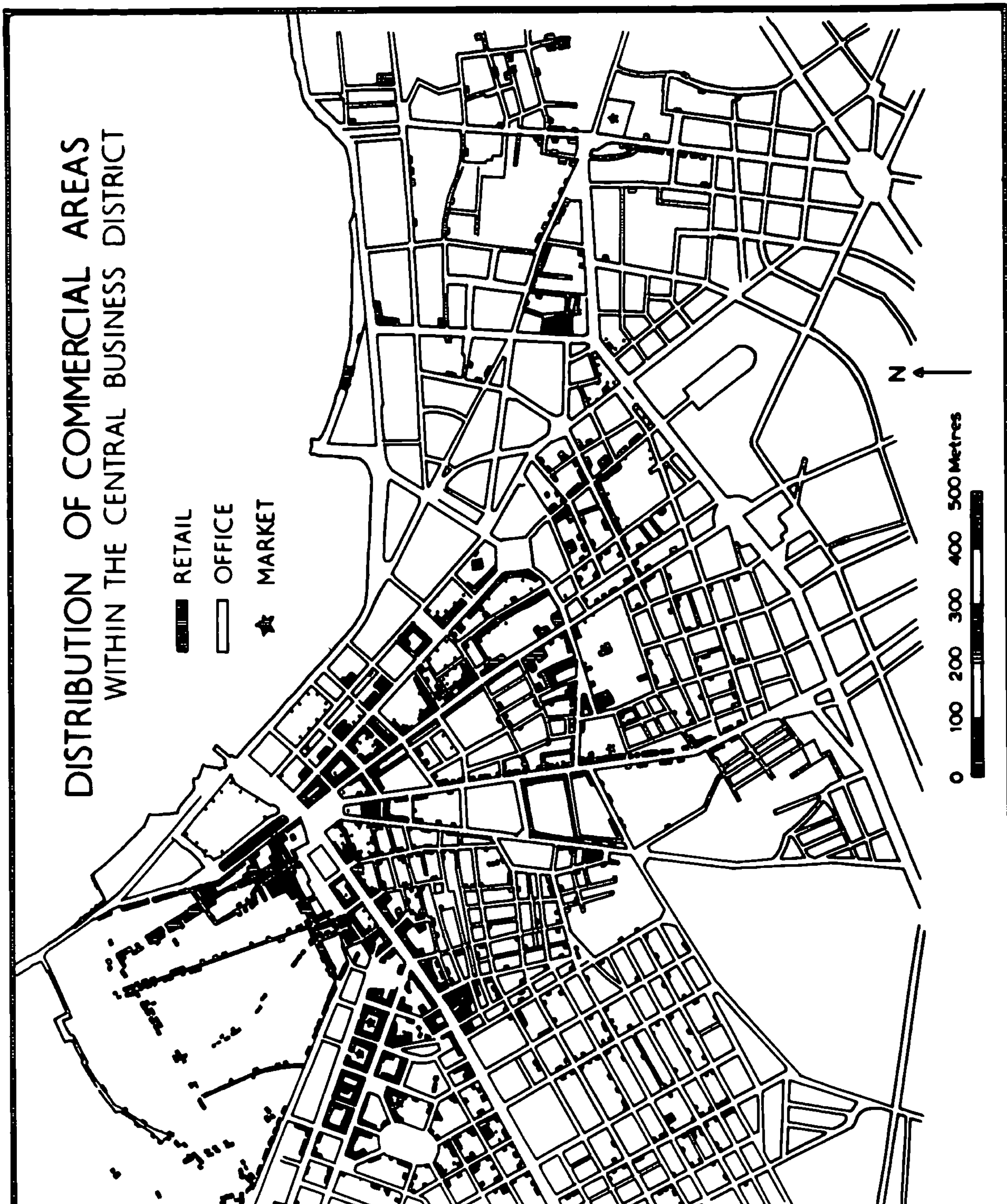
There are a number of factors which stimulated the growth of the central business district First is the impact of Independence and increasing expenditure of the Central Libyan Government Secondly, the flow of foreign capital after oil discoveries and production increased the demand for offices by the oil companies Thirdly, the flow of Cyrenaican capital to Tripoli, particularly after the unification of Libya in April, 1963 was also important Fourthly, demand for goods of various kinds by the local and foreign communities has risen steadily Fifthly, Libyan Government projects, such as the Five Year Plan of £L 200 millions (1963–1968) had a great impact on the central business district in terms of demand for offices for transport and other commercial companies Sixthly, the concentration of about one quarter of a million of population in Tripoli creates a great deal of business activities

Delimitation of the Central Business District

This delimitation is based on the extensive study conducted by the writer on the central business district on every multi-storey building and its various uses (Plates 8 1 and 2) All the offices of commercial companies, customs clearings, offices of banks, shipping, travel, airline agencies etc were surveyed Distinction is made between offices occupying ground floors and those on other floors (Fig 8 5 and 6)

The total number of offices and office services is 1,500 These occupy an area of 31 4 hectares The number of employees is 9,432 and the average number per establishment is 6 5 persons (6)

Figure 8 5



DISTRIBUTION OF COMMERCIAL AREAS
WITHIN THE CENTRAL BUSINESS DISTRICT
RETAIL
OFFICE
MARKET
N
0 100 200 300 400 500 Metres

Figure 8 6

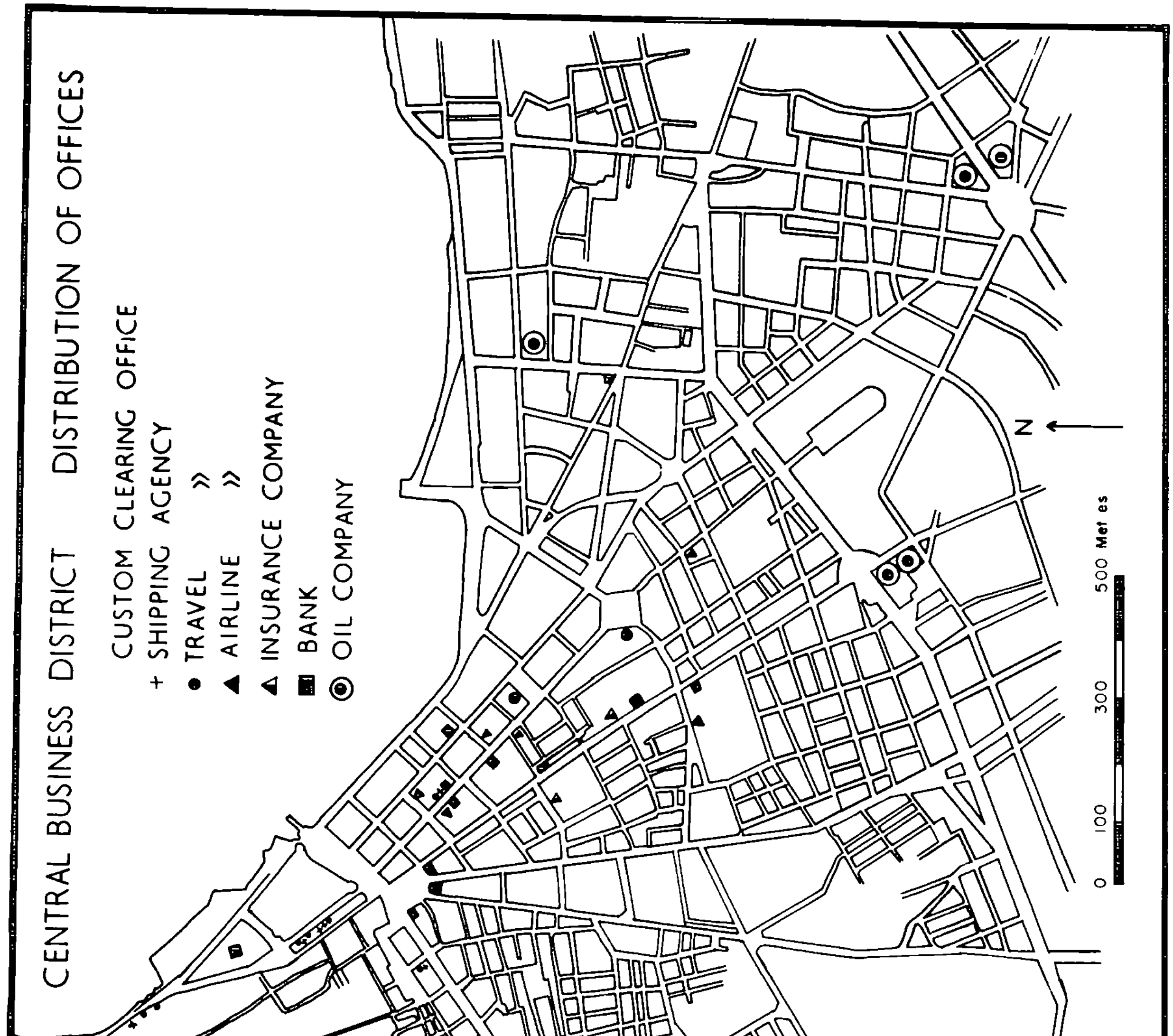

CENTRAL BUSINESS DISTRICT DISTRIBUTION OF OFFICES
CUSTOM CLEARING OFFICE
+ SHIPPING AGENCY
TRAVEL
AIRLINE »
INSURANCE COMPANY
BANK
OIL COMPANY
OLD TOWN
N
0 100 300 500 Met es

Table 8 4 Number of business offices within the Central Business District

Kind of business	Libyans	Italians	Jews	Foreign	Total
Commercial companies	193	39	12	122	366
Commercial agencies	166	9	1	31	207
Industrial companies	31	24	1	12	68
Customs clearings	15	9	1	2	27
Shipping agencies	15	6	-	4	25
Travel agencies	4	-	-	10	14
Airline agencies	5	-	-	13	18
Building & road contractors' companies	73	14	1	44	132
Building contractors (individual firms)	92	32	-	-	124
Drilling contractors	-	-	-	42	42
Engineering contractors' services	-	-	-	27	27
Contractors of technical services for oil wells	-	-	-	34	34
Electrical contractors' services	-	-	-	11	11
Wireless contractors' services	-	-	-	7	7
Geophysical contractors' services	-	-	-	13	13
Seismograph contractors Co	-	-	-	6	6
Welding contractors	-	-	-	7	7
Contractors of pipeline services	-	-	-	9	9
Consulting contractors' services	-	-	-	5	5
Catering for oil companies	-	-	-	32	32
Oil companies	-	-	-	40	40
Transport companies	61	9	1	-	71
Insurance companies	1	7	-	8	16
Accounts	14	3	-	5	22
Banks	6	2	-	4	12
Lawyers	48	11	-	1	60
Notaries	4	2	-	-	6
Brokers	51	-	-	-	51
Doctors' clinics	7	29	-	12	48
Total	786	196	17	501	1,500

Source Field work survey, 1966-1968

1 Commercial companies

These are widely distributed in the central business district, with offices in multi-storey buildings About 52 7 per cent of these commercial companies are owned by Libyans and 33 3 per cent are owned by international companies The rest are owned by Italians and Jews

Commercial companies deal generally with various kinds of imports such as refrigerators, cookers, cars, agricultural tools, stationery equipment, radios, television sets, etc Some of these commercial firms specialize in supplying the oil companies operating in Libya with equipment and various supplies The function of these companies is to import goods from abroad in order to sell these in the wholesale market or through the companies' shops

Foreign companies tend to occupy large offices in multi-storey buildings, while Libyans, Italians and Jews tend to have their offices in the old multi-storey buildings because of lower rents Foreign firms deal mostly in more expensive goods such as cars, television sets, electrical equipment, etc A high proportion of these offices are found in the main commercial streets, others lie within other commercial sub-streets On the other hand, commercial companies owned by Libyans deal with less expensive goods, such as foodstuffs, stationery equipment, transistor radios, etc

2 Commercial agents

Most of the commercial agents' offices are concentrated within the core of the central business district, particularly in Shara Omar el Mukhtar, El Rashid, 24 December and other commercial streets This is generally related to the fact that commercial agents tend to have their offices near the wholesale and retail shops

The main commercial function of the commercial agents is to represent the international companies in various European and Asian countries such as France, U K , Holland, Germany, Italy, India, Japan and Hong Kong for wholesale of different types of goods on the basis of certain commissions varying from 5 to 10 per cent for each commercial transaction Thus the commercial agents facilitate and promote marketing activities of both wholesalers and retailers who cannot contact each other directly In many cases the commercial agent represents various international companies depending on his reputation and commercial record

About 80 2 per cent of the commercial agents are Libyans and the rest are Italians, Jews and foreign agents But the number of non-Libyan agents has declined in recent years due to the increasing competition on the part of Libyan businessmen who have become very interested in this particular kind of activity The reason for this lies in the high commission given by international firms to Libyan agents, a factor which encourages Libyan businessmen to seek such enterprises

3 Industrial companies

The distribution of industrial companies is generally related to the multi-storey buildings of the central business district, with a special concentration in 24 December and Istiqlal Streets The additional offices of the city industrial firms tend to seek less expensive buildings within the central business district in order to avoid high rents, over one-third of these industrial offices are attached to the main industrial firms located in Tripoli This is primarily related to the desire of Libyan firms to have direct commercial contacts with their dealers and customers in the central business district The rest of the offices are of foreign industrial firms, representing their companies in Libya They mostly deal with oil companies and the various Libyan ministries

4 Customs clearings

Customs clearing offices are highly concentrated in El Istiqlal and Ibn Said Streets near the port of Tripoli Here the customs clearing offices occupy the ground floors of multi-storey buildings, with floor areas ranging from 50-100 sq metres A high proportion of these offices are owned by firms and the rest owned by individuals Less than half of the owners are Libyans, the rest are Jews, Italians and foreigners

The main function of these offices is to facilitate the release of the goods arriving in Tripoli port so that the wholesalers and other commercial agents can transport such goods from the port area The release of goods is rather a complicated procedure and cannot be easily done without assistance from these offices

5 Shipping Agencies

These agencies are found in four commercial streets Istiqlal, 24 December, El Baladia and Haiti Streets These sites therefore are more flexible than the customs clearing offices All shipping agencies' offices occupy large ground floors to accommodate their staffs Until recently, all shipping agencies were run and owned by Italians, Jews and foreign firms, but at the present about two-thirds are owned by Libyans

The function of these shipping agencies is to arrange transportation of passengers' luggage or wholesale imports and exports from and to Libya through the international shipping companies These agencies can also arrange for Libyan passengers to travel overseas by boats operating between Tripoli and other ports

6 Travel agencies

All the offices of travel agencies are located within the main commercial streets of the central business district (El Baladia, Istiqlal and 24 December). This location is principally due to the existence of intensive commercial activities within this area These offices occupy ground floor areas and tend to be modern and to have relatively large staffs Most of these agencies represent international travel agencies in various European and Asian countries such as France, Germany, U K , Italy, Greece, Egypt, Lebanon, etc Only one-third of these travel agencies are Libyan The rest are foreign

Travel agencies draw a large number of customers (Libyans, Italians and others) particularly during the summer months when most employees and civil servants take their holidays

7 Airline agencies

These agencies are also located in the main commercial streets such as Istiqlal (7 agencies), 24 December (2 agencies) and El Baladia (2 agencies) Other airline agencies are found in other sub-streets near the main major thoroughfares All airline agencies are representatives of the international airline companies in Europe, Africa and Asia (e g Alitalia, B E A B O A C , Air France, KLM, SABENA, etc) There is only one Government airline agency (KLA) which operates within and outside the country (to nine foreign capitals in Africa and Europe)

It is interesting to note that all the airline agencies occupy excellent sites in the new multi-storey buildings with large floor areas They draw their customers from the middle and upper class people as well as tourists and oil company employees

8 Building and road contractors' companies

The offices of the above companies are scattered within the whole central business district with some special concentration in Omar el Mukhtar, 24 December and Istiqlal Streets In general, building and road contractors' companies tend to have marginal sites away from the core of the central business district

They deal mostly with tenders from the government and oil companies for the construction of schools, hospitals, houses, roads and other constructions About 56 8 per cent of such companies are owned by Libyans The rest are owned by Italians, Jews and foreigners

9 Building contractors (individuals)

These are scattered throughout the whole central business district, without any particular concentration in any one street This is so because most building contractors have not sufficient capital to cover the expenses and rents of offices and staff in the new multi-storey buildings They tend therefore to have their offices in the old multi-storey buildings which have lower rents than the new ones

Most of these individual contractors are professional architects They can undertake various building operations from designing to construction In most cases the contractors design and supervise the building operations

Nearly three-quarters of building contractors are Libyans The rest are Italians who established their offices during the Italian rule, and still tend to dominate the building and constructional activities in Tripoli

10 Oil company offices

In Tripoli there are 233 oil companies and related firms such as drilling contractors, electrical contractors' services, engineering contractors' services etc (Table 8 4)

The major producing companies have complete blocks located at the periphery of the southern and western parts of the central business district For example, the offices of the Esso Oil Standard lie to the south of the central area in the Shara Mohammed Ali Essanussi near the General Government Hospital, where three building blocks accommodate their large staff and employees Oasis Oil Company has two buildings of five storeys each located to the west of the central business district near Tripoli International Fair in Shara Omar el Mukhtar (Plate 8 3) Mobil Oil has a large multi-storey building of six floors sited in the Shara el Magarba to the south of the central business district near the Royal Palace "Kasr el Khold " The offices of the Occidental Oil producing company are sited in the Mitchell Cotts' multi-storey building opposite to the Waddan Hotel

Other oil producing companies have scattered offices throughout the central business district Moreover, the offices of companies catering for the major producing companies are scattered throughout the central area with a special concentration in three multi-storey buildings in the Shara el Malika to the north-east of the Royal Palace (Plate 8 4)

11 Transport companies

A special concentration of small transport companies is found in and around the 9 August Square, where twelve of these companies are located They carry passengers from Tripoli to Cyrenaica and Fezzan and to Tunisia, Algeria, Morocco and Egypt They also provide other services such as transportation of luggage and goods within the country Most of these small

Plate 8.3 Oasis Company's offices in Omar el Mukhtar street

Plate 8.4 Other oil companies' offices in Ahmed el Sharif street

transport companies occupy ground floor areas which vary from 100-200 sq metres, and the majority lack efficiency and good management

Large transport companies which have more capital are sited elsewhere in the central business district and generally deal with the Government and oil companies These transport companies have large trucks and more equipment, they only operate in Libya About 85 9 per cent of these companies are Libyan owned The rest are owned by Italians and Jews

12 Insurance companies

There are only two insurance companies in Istiqlal Street, another is located in 24 December Street, and others are sited in various multi-storey blocks All insurance companies have their offices in the new multi-storey buildings All are foreign, and mostly belong to various western countries such as Italy, U K , and U S A There are only two Arab companies, one Jordanian and one Egyptian

The function of these insurance companies varies from life insurance to insurance against road accidents and to compulsory car insurance The emergence of such insurance companies is chiefly due to three factors, firstly, the increasing number of cars in Libya from 1951 onwards Secondly, discoveries of oil in Libya, and thirdly, the increasing number of road accidents

13 Banks

Banks are mainly concentrated in the core of the central business district For example, Maidan Ash Shuhada has three banks, 24 December Street has two, and Istiqlal Street has three, while Omar el Mukhtar Street has one Another two banks are located in El Baladia Street, and the Bank of Libya is situated to the north of the castle This concentration of banks within the core of the central business district is associated with the commercial and business activities (Plate 8 5)

About 50 per cent of the commercial banks are Libyan with 49 per cent foreign capital The rest are foreign banks such as the Italian Banco di Roma and Banco di Napoli, the British Barclays Bank, D C O Ltd or French Societe Foncier d'Afrique There is also one Jordanian Bank (i.e the Arab Bank) Most of these banks occupy independent blocks of multi-storey buildings and have excellent sites within the core of the central business district

14 <u>Accountants</u>

Only two accountants' offices are located in the 24 December Street Another two are situated in the sub-streets between Istiqlal and 24 December The rest are scattered throughout the central business district All the accountants offices are in the first, second or third floors of the multi-storey buildings About two-thirds of these offices are owned by Libyans, the rest are owned by Italians and foreign companies Until recently, most of the accountants' offices were non-Libyan However, owing to the impact of higher education and the increase in the number of graduates from the Universities of Cairo and Libya, Libyans began to compete with foreign

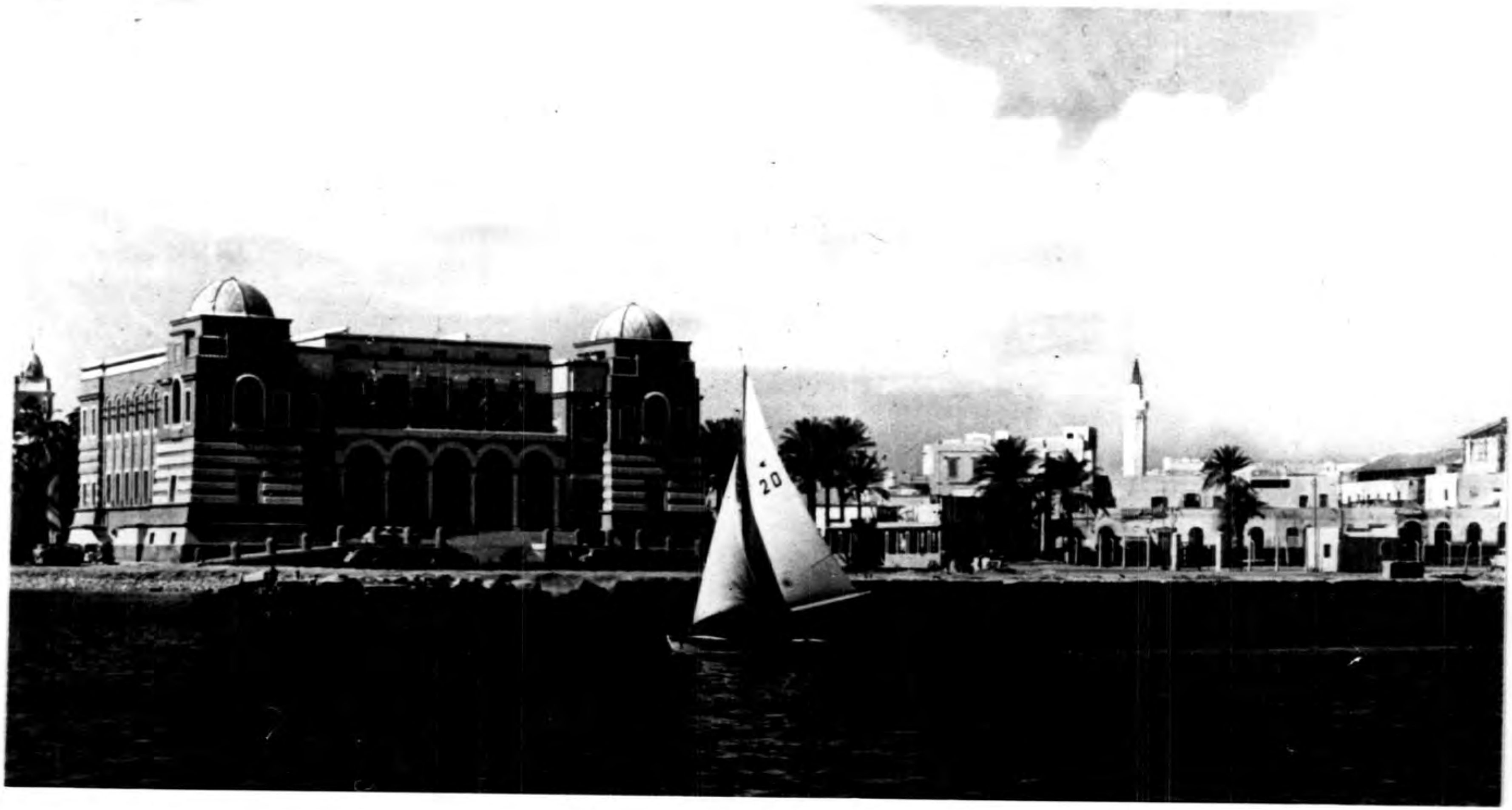


Plate 8.5 Bank of Libya

accountants (Italians, Palestinians and other nationalities)

The majority of the accountants' offices have business with the oil companies and foreign firms The rest deal with Libyan commercial, industrial and transport companies, as well as wholesaling and retailing shops

15 Lawyers

Lawyers have their offices mainly in two streets, i e Omar el Mukhtar (7 offices), 24 December (3 offices) Other offices are scattered throughout the main commercial streets of the central business district These offices tend to occupy premises in the old multi-storey buildings because of lower rents Most of the Libyan lawyers are still new to the occupation as they only emerged from 1959 onwards and cannot afford to pay high rents in the new multi-storey buildings About two-thirds of Tripoli's lawyers are Libyans who graduated recently from Cairo University The rest are Italians and Jews

16 Notaries

They are not numerous within the central business district They are sited in various scattered streets such as Istiqlal, Cairo, Tehran, 24 December and Omar el Mukhtar Four notaries are Libyans and two are Italians The main function of these is to supervise the purchase of land, property and other purchase agreements between firms or between individuals and commercial firms

17 Brokers

The majority of Libyan brokers have no fixed offices, but tend to gather in three main cafe-bars Commorcio, El Rashid and El Azhar, where they meet their customers for the selling or purchasing of land and real estate One-third of brokers have offices which can be found in three main streets 24 December, Istiqlal and Omar el Mukhtar

The absence of permanent offices for the majority of Libyan brokers is largely due to a variety of reasons, first, lack of municipal regulations relating to this kind of business activity secondly, brokers practise their profession as individuals, they do not belong to an agency as in the case of Britain

18 Doctors' clinics

The existing doctors' clinics are highly concentrated in the eastern part of the central business district in the main commercial streets, i e Istiqlal, 24 December, Mizran and Omar Ibn el Ass Here there are 21 clinics which occupy premises in the old multi-storey buildings The western part of the central business district has 27 doctors' clinics This is due largely to the fact that the western part is not fully utilized for commercial and business activities

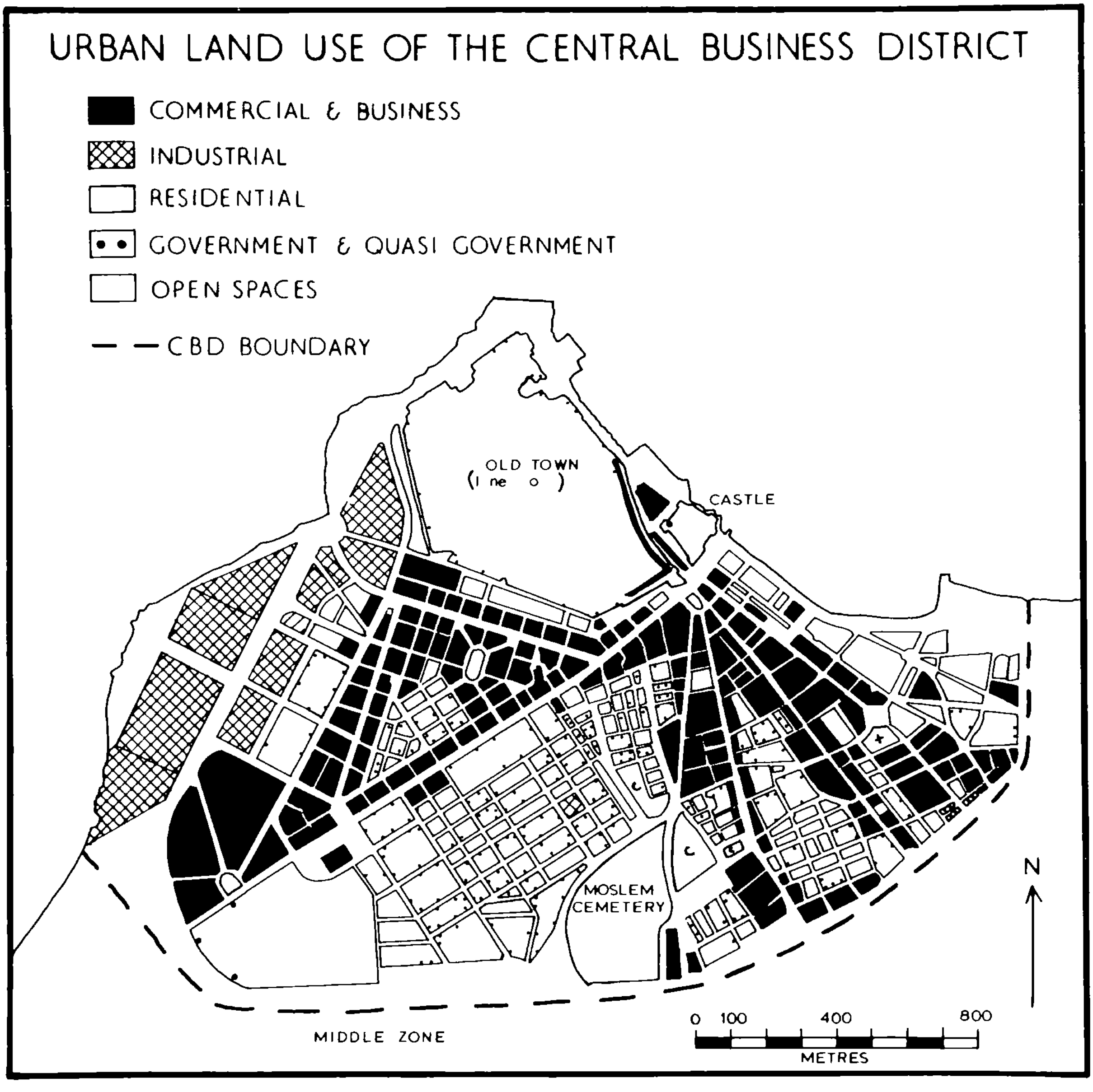
The 48 clinics in the central business district constitute more than half of the total number in Tripoli (86) These clinics in the central business district not only serve the population of the area but also the whole population of the city, Tripolitania and Fezzan

Apart from the business function of the central business district, there are 28 industrial firms located within the central area to the north and west These perform various kinds of industrial activity such as bakery, textiles, wood working, soft drinks, macaroni paste manufacture, tailoring and mechanical workshops

Offices of the central Libyan Government, the headquarters of the Muqataa of Tripoli and the Municipality offices are also located within the core and throughout the central business district (see Chapter 4)

Thus the commercial and business functions of the central business district are growing rapidly owing to the greater demand exerted on the area by commercial companies, shops, offices and various other business activities As a result, several old two and three-storey buildings which were erected during the Italian rule, were demolished and replaced by new multi-storey buildings This urban renewal which takes place within the core and throughout the central business district, will increase the number of shops, offices and other business activities In other words, both vertical and horizontal expansion of the central business activities will reduce the residential and other non-commercial functions This process of the expansion of business activities is taking place very rapidly in many sections of the central business district and it is expected that the central business district will absorb in the future more residential areas, particularly those old Arab houses located in both Mizran and Belkheir quarters (Fig 8 7)

Figure 8 7


URBAN LAND USE OF THE CENTRAL BUSINESS DISTRICT
COMMERCIAL & BUSINESS
INDUSTRIAL
RESIDENTIAL
GOVERNMENT & QUASI GOVERNMENT
OPEN SPACES
CBD BOUNDARY
OLD TOWN
CASTLE
MOSLEM CEMETERY
MIDDLE ZONE
0 100 400 800
METRES
N

At the present, however, apart from the business function, the residential function is still important within the central business district. Here there are two residential quarters, i.e. Belkheir and Mizran with a total of 3,972 dwellings containing 29,802 inhabitants. The density of population is 250.4 persons per hectare. Most of the residents are middle class people comprising Libyans, Italians and other nationalities. Libyans of lower groups are also living within the slum areas of the quarters.

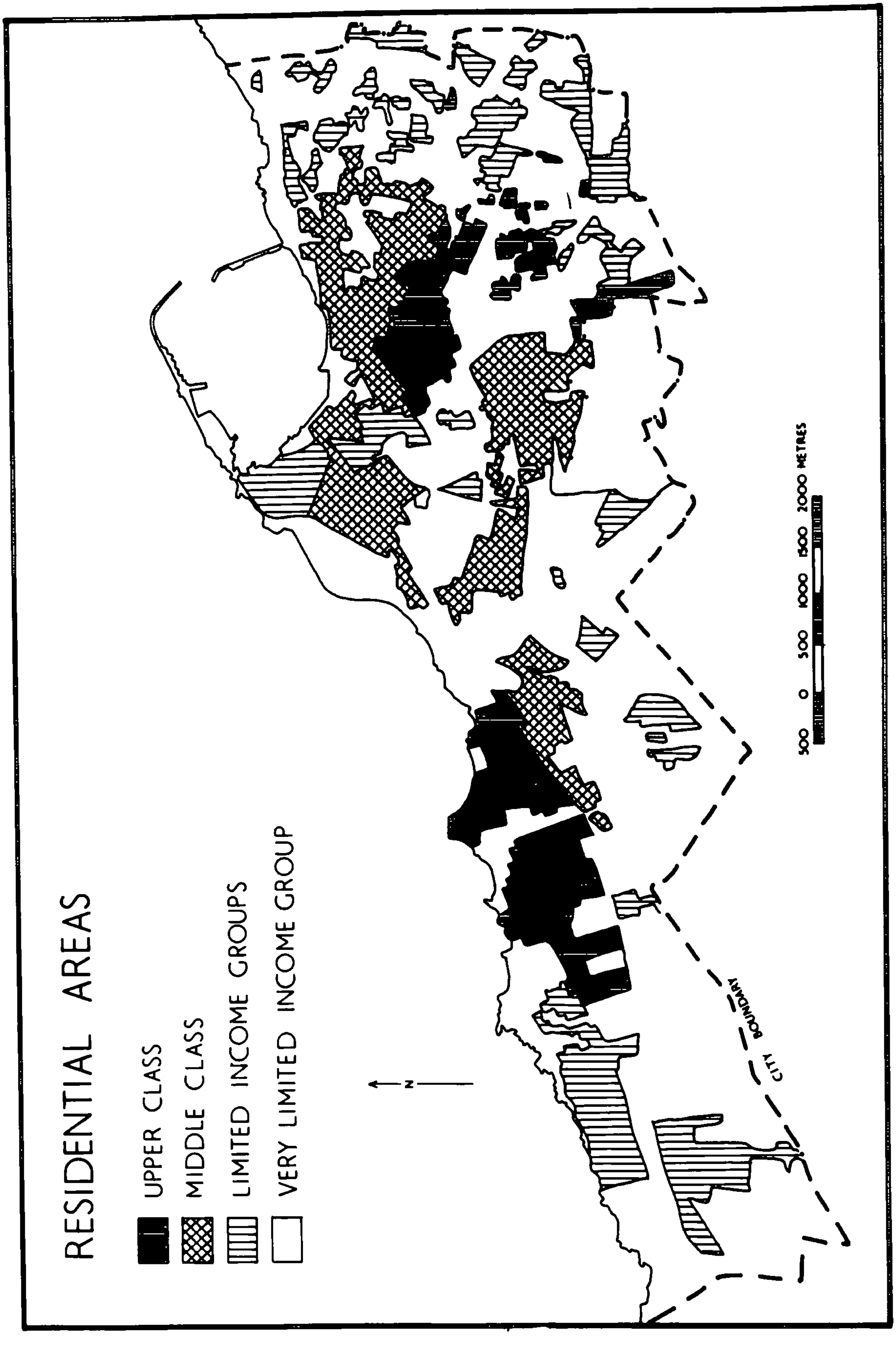
<u>The Middle Zone</u>

This zone is situated to the south of the central business district and occupies an area of 1,580 hectares of 45.8 per cent of the total. It is mainly a residential zone. There are ten residential quarters in this zone (Dahra, Shara el Kebir, El Nuflein, Zawiet el Dahmani, Shara el Shatt, Shara Ben Ashur, Shara el Bay, Bu Harida, Shara el Srim and Shara el Zawia). All these quarters were in existence during the Ottoman rule and formed scattered residential areas in the <u>Menshia</u> area. They developed for urban use during the Italian rule and this was maintained after Independence.

The population living within the middle zone numbers 100,890 inhabitants, or 47.4 per cent of the total population of the city in 1964, and the population density is 63.8.

The middle zone has, generally speaking, three classes of people (Fig. 8.8). The upper income groups tend to live in the Shara Ben Ashur quarter. Here the "Città Giardino" or Garden

Figure 8 8


RESIDENTIAL AREAS
UPPER CLASS
MIDDLE CLASS
LIMITED INCOME GROUPS
VERY LIMITED INCOME GROUP
N
CITY BOUNDARY
500 0 500 1000 1500 2000 METRES

City, mostly composed of villas, occupies the northern section of the quarter Rents are high and the standard of living is also high It is estimated that the annual income of individuals living in this area range from £L 2,400-3,359 (7) The majority of the residents are foreigners, but some Libyans with high incomes reside here

Middle class areas occupy most of the ten residential quarters The majority of dwellings are traditional houses, the rest being of a modified type About 90 per cent of dwellings are inhabited by Libyans of the middle income groups whose annual earnings range from £L 1,030-2,399 The remainder are Libyans of lower income and live in the old Arab dwellings Their standard of living is low and their annual income varies from £L 480-1,079 (8)

The middle zone has industrial uses Here there are 37 factories specializing in various industrial activities Their sites tend to concentrate within the southern and western parts of this zone The majority of these industries were established since Independence, the rest being established during the Italian rule There is a tendency on the part of the owners of these industrial firms to move their factories to the new industrial areas along the Suani Road and to the Gurgi area

Government buildings are found in numerous sites within the middle zone, particularly in the Shara el Shatt quarter where there are several Libyan ministries The middle zone also contains other various Governmental buildings such as the

Ministry of Health, Government General Hospital, Ministry of Social Affairs, and Libyan Broadcasting Station There is a tendency on the part of the Central Libyan Government to rent new offices within the middle zone away from the city centre where the problem of parking is very acute

Apart from the Government buildings there are two large military barracks located within the Shara el Srim near the Azizia Gate These barracks were originally built by the Italian army and are occupied now by the Libyan army

The agricultural use in the middle zone is important, because agricultural lands occupy most of the eastern and south-eastern parts of the zone Although land speculators developed extensive areas in the Shara Ben Ashur, Shara el Kebir and Zawiet el Dahmani for residential use, the owners of the existing agricultural farms are still resisting the high selling price of land

The Outer Zone

This is situated immediately to the south of the middle zone and occupies an area of 1,714 5 hectares or 49 7 per cent of the total area of Tripoli The zone has various urban and agricultural uses

The outer zone contains three residential quarters Shara el Garbi, Shanty Town and Gargaresh The number of dwellings is 15,903, housing 59,065 or 27 8 per cent of the total population of the city in 1964 with a population density of 34 4 The outer zone contains three classes of residential areas, the upper class residential area is situated in Giorgimpopoli and Gargaresh along the western coast between the Wadi Mejenin course and the western boundary of Tripoli Here Americans, British, French and other Europeans reside They are mostly employees of oil companies, diplomatic corps, Americans working at Wheelus Field (American Air Base to the east of Tripoli), and Libyans of high income groups The standard of living within this residential area is high It is estimated that the annual income is from £L 3,360-13,360 (9)

Middle income groups are to be found within the Shara el Garbi and part of the Gargaresh quarter The type of dwellings consists generally of new "traditional houses" built since 1951 The majority of the resident population are Libyans who moved recently from the inner zone and central business district to live within the new middle class residential area The rest are of foreign nationalities The individual income is similar to the income of the middle income groups of the middle zone

Low income groups are mostly concentrated within the Gott el Shaal to the western part of Gargaresh Here the price of land is low, about £L 2-4 per sq metres, attracting individuals with limited income to build their houses within this area A high proportion of the resident population are rural immigrants The remainder are Libyans who returned recently from Tunisia

Very low income groups live in the Shanty Town to the south of Tripoli (see Chapter 6) The area is inhabited by different types of in-migrants Cheaper accommodation is the main factor for attracting such in-migrants to this area

The Shanty Town covers an area of 171 hectares and can be divided into two sub-areas The southern residential area lies to the south of the Ring Road and is bigger than the northern residential area It contains about 90 per cent of the Shanty Town dwellings, and is exclusively allocated for residential use The northern section of the Shanty Town has more commercial use and contains the Shanty Town's market More than one hundred stalls selling various kinds of foodstuffs, vegetables, clothes, transistor radios, kitchen utensils, live animals, etc can be found The market provides all requirements of the Shanty Town's inhabitants Apart from this commercial use of the northern section of the Shanty Town, it functions also as a residential area for about 10 per cent of the total number of the population of this area The average annual income of the individual in the Shanty Town is £L 120-479, the lowest income group in Tripoli (10)

The industrial uses within the outer zone can be divided into three industrial areas

1 Sidi Mesri and Bab Ben Gashir industrial area is located to the south of Tripoli Most of the industrial firms are old and were established during the Italian occupation, others emerged since 1956 The area has 13 industrial firms, mostly brick industrial factories and food processing factories

2 The Suani Road industrial area is the most important and the largest All the 30 industrial firms in this area were established since 1956, and engage in various kinds of industrial activities such as agricultural and food processing, paint and match manufacture and engineering

3 The Gurgi industrial area is located to the west of the Wadi Mejenin It lies to the north of the previous one and has only eight industrial firms

The outer zone comprises also various governmental and semi-public buildings The Ministry of Agriculture, for instance, is located at Sidi Mesri, it is the only ministry in the zone The Central Prison lies in Bab Ben Gashir area and another government prison is situated within Gargaresh quarter near the Mental Hospital A training centre for Police Force is located in Gurgi The Sports Town is the most important public area, it is located to the western part of the Shara el Garbi quarter in Gurgi area, and occupies an area of 400 hectares Construction of this town began in 1966 and it is expected to be completed in 1970, and its cost is estimated to be more than £L 10 millions

The wholesale municipal market is owned by the Municipality of Tripoli and covers an area of 200 hectares The market is sited to the east of the Wadi Mejenin (see Chapter 4)

It can be seen that the outer zone has fewer governmental and public buildings than the middle zone This is so because of its distance from the middle zone and the inadequacy of public transport

Moreover, the outer zone contains two agricultural belts The first is situated in the Gurgi area, including all the ex-Italian and Libyan farms The second comprises the western part of Gargaresh Here the agricultural land consists generally of small Arab farms The average size for holdings does not exceed one hectare The land is still being cultivated and irrigated by traditional means of irrigation

Open spaces occupy extensive areas within the eastern and western parts of the outer zone A high proportion of open spaces within the western part are owned by the private sector, particularly by land speculators who buy the land for private use or for future sale The eastern part of the outer zone, particularly near the Shanty Town and the Wadi Mejenin is owned by the Government and the Municipality of Tripoli

Recreational areas are located along the western coastal zone between the central business district and the western boundary of the outer zone They include six beaches (one for the Libyan Army, two municipal, one Governmental and two private) The natural sandy coast is the key factor for the existence of such facilities along the western coast Only one beach was developed by the Italian Administration, the rest were developed since 1951 These beaches function only during the summer season (June-September) They serve the entire Libyan population and foreign communities They are becoming increasingly popular, particularly among young adults

Conclusion

It can be seen that the land uses of Tripoli vary considerably within the urban zones This is related to the historical evolution of the site of the city, the impact of the Italian colonization, and finally to the recent urban development which enlarged the built-up area The urban zones function differently and each urban zone has special land use characteristics and functions Although the urban land uses are the most dominant in the city, agricultural land use is still important In other words, the urban land uses are still changing and developing at the expense of agricultural land use

REFERENCFS

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2 Ibid, p 68

3 Ministry of Agriculture, 1960 Census of Agriculture, Tripoli, 1962, p 248

4 Ministry of Planning and Development, op cit , p 61

5 Ibid, p 61

6 Ibid, p 69

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CHAPTEP IX

CITY PLANNING AND MUNICIPAL PROGRAMMES

City planning and municipal programmes are of vital importance to the urban development of Tripoli Formal city planning began during the Italian occupation and the municipality began its development programmes in 1963 In order to understand the present day city planning, it is useful to examine this process since 1911 The impact of the Italian colonization was marked on the new city and particularly on the central business district, for it changed the land use of the Menshia area from agricultural land interspersed with a few urban clusters to a completely built-up urban area Independence of the country in 1951 and later socio-economic forces have also greatly influenced the urban growth of the city A general picture of the city planning carried out by the Italian administration is indispensable for understanding contemporary and future city planning It is also necessary to examine the impact of the municipal programmes on city development as well as the major problems facing the city's future such as the problems of overspill population, the Shanty Town, street planning and urban facilities

9 1 EARLY TURKISH MEDIAEVAL PLANNING

Tripoli had no master plan of any kind before 1911 The Turkish Administration (1551-1911) left the built-up area to expand within the Old Town of Tripoli without proper planning Also the administration did not supervise the planning of Menshia's quarters Both the urban developments of the Old Town and Menshia were based entirely on a mediaeval plan which is exemplified in the narrow twisting streets of today In addition, the layout of buildings was not homogeneous, and comprised both Arab and Turkish designs Apart from these, urban amenities were absent within the residential areas

9 2 ITALIAN CITY PLANNING

When the Italians occupied Libya in 1911, they found Tripoli city without a master plan regulating its urban development They concentrated their planning only on the Menshia area Here the Italians demolished all public buildings in the Shara Istiqlal, Mizran and other streets and confiscated all the agricultural lands surrounding the inner zone of the city, replacing them by multi-storey buildings designed according to the city master plan As a result, a new modern sector emerged, occupying the whole central zone which now covers the central business district (see Chapter 3) The Italians based their city planning on a grid plan which expanded southwards in a semi-circular development They only left two Arab residential areas - namely Mizran and Belkheir quarters - without planning This was probably due to political rather than technical reasons These two quarters now lie within the central business district

The Italians aimed by their city planning to create a new colonial city in Libya competing with French colonial cities in North Africa, like Tunis, Bone, Algiers, Oran and Casablanca They also intended to attract more Italians such as skilled workers, technicians, doctors, engineers and businessmen to migrate to Tripoli The Italians succeeded in their policy and did tremendous work on the city plan concerning themselves not only with the layout of buildings, streets, roads, urban amenities (sewerage system, piped water, gas and electricity), but also with recreational areas along the sea-shore In short, the Italians created a new colonial city in Libya based entirely on modern European planning ideas

Italian Master Plan

In 1934, the Italian Administration produced a master plan for Tripoli Its aim was to regulate the city's future urban development on the basis of "zoning " Accordingly, the city was classified into the following major zones [1]

1 Multi-storey buildings - "Palazzi"

2 Traditional houses - "Case Indigini"

3 Villas - "Villine"

4 Light industries - "industriali"

This classification of Tripoli into zones was based on colonial planning ideas which aimed to segregate the indigeneous inhabitants within the area of traditional houses, while the multi-storey buildings and villa zones were reserved entirely for the Italian population The light industries zone was divided into three sub-areas within the present central business district and the Middle Zone

The Italians did not plan for the future of the old Arab residential areas of Mizran, Belkheir and Dahra quarters which interrupted the extension of the modern Tripoli sector They also left the old Arab and Jewish cemeteries within the central business district without attempting to remove them to other parts of the city (Plate 9 1)

However, the Italians succeeded in regulating the height and layout of multi-storey buildings, and also developed five residential areas on the Italian style These areas are now located within the middle zone, i e Dahra, "Case Popolare" and "Città Giardino" and Shara el Shatt Three of these were reserved for Italian settlers and Shara el Shatt residential quarter was reserved for high Italian officials (Army and civil servants) The creation of "Città giardino" or garden city was inspired by the idea of garden cities as propounded by Ebenezer Howard Therefore Tripoli experienced for the first time the emergence of the garden city The chosen site for this now occupies the northern part of the Shara Ben Ashur quarter Owing to the encouragement given by the Italian Administration to the private sector, many Italians built villas for either private use or for renting to high Italian officials

Plate 9.1 Western part of the central business district. Note the location of the Arab cemeteries to the south.

The Italians did not provide plans for the outer zone but left it for agricultural use

Generally speaking, Italian planning affected drastically the whole central business district and some parts of the middle zone, but left the whole inner zone to function for the Arab population

9 3 BRITISH ADMINISTRATION AND POST INDEPENDENCE PLAN

With the coming of the British Administration of Libya in 1943, Tripoli did not witness any urban development or planning programmes, owing to the instability of the political situation and obscurity of the future of the country

Moreover, the Municipality of Tripoli did not seriously influence the urban development of the city until 1963 This was primarily related to financial reasons One consequence of this can be seen in the absence of the essential urban amenities in both the old and the new Arab residential areas Further, the absence of a town planning department attached to the Municipality (because of departure of the Italian town planners to Italy from 1943 onwards) contributed enormously to the confusion in some of the new residential areas The Municipality thus remained without a town planning department to supervise the residential growth which began in 1951 Thus many private builders erected their dwellings without the permission of the Municipality, a factor which resulted in the poor layout of buildings, streets and roads This confusion in building activities affected two residential areas located within the outer zone - namely Ras Hassan in the Shara Ben Ashur and Gott el Shaal in Gargaresh (see Plate 3 4) Apart from poor planning, these two residential areas lack some of the basic urban facilities

In 1958, the Municipality of Tripoli realized the danger of uncontrolled urban growth, it invited Professor C Valle from Italy to lay down a master plan for Tripoli, and he prepared this plan after an extensive study of the old Italian master plan of 1934 together with the new requirements needed for residential and industrial growth of the city This plan was also based on "zoning" which was classified as follows (Fig 9 1)

1 Multi-storey buildings

2 Villas

3 Traditional Arab houses

4 Light industries

5 Heavy industries

6 Wholesale market and slaughter house

7 Recreational areas and open spaces

Multi-storey buildings are permitted to expand southwards within the middle zone, whereas the Gargaresh and Shara Ben Ashur quarters are allocated for the further expansion of the villa zone The growth for the traditional houses could proceed within the middle zone in order to provide residences for the middle class and limited income groups into the middle and outer zones of the city

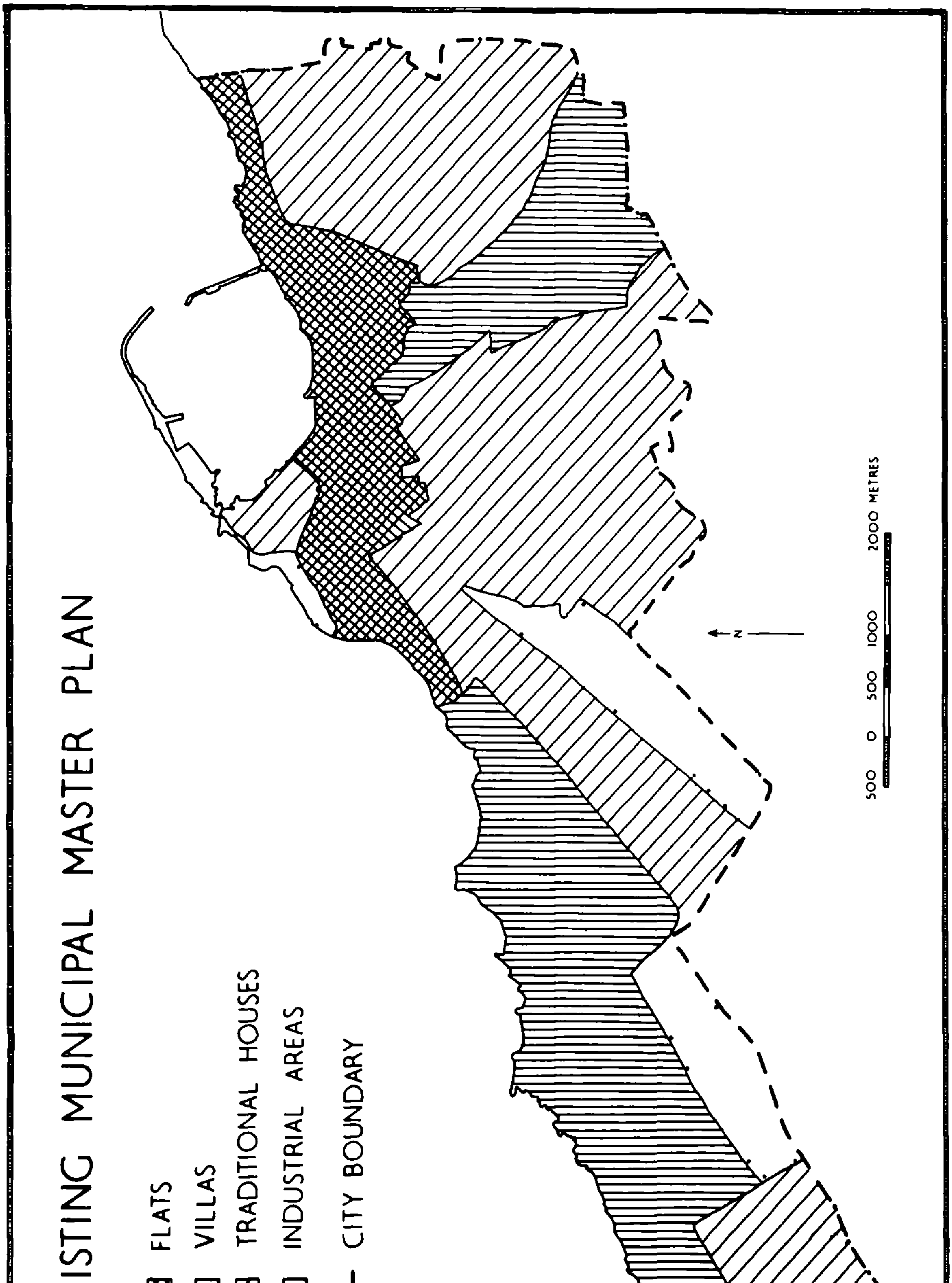

EXISTING MUNICIPAL MASTER PLAN
FLATS
VILLAS
TRADITIONAL HOUSES
INDUSTRIAL AREAS
CITY BOUNDARY
N
500 0 500 1000 2000 METRES

Figure 9 1

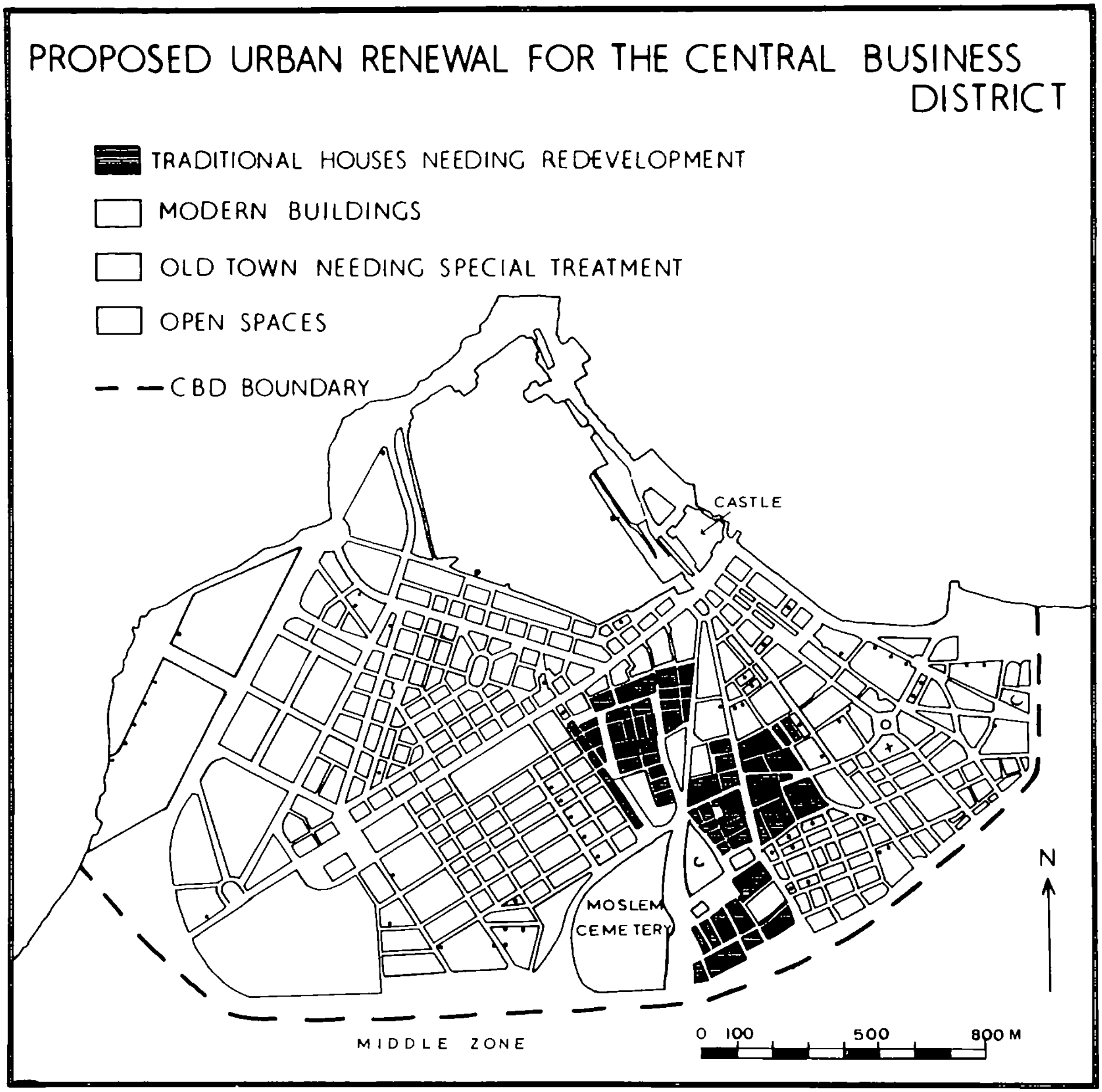
Light industries such as woodworking, soft drinks, electrical workshops and other car services are allowed to expand within the north of the central business district, whereas mechanical workshops could be established within the middle zone Heavy industries and other large industrial firms should be sited within the industrial area of Gurgi and along the Suani Road

No mention has been made of the sites of the Government buildings, recreational areas and the future of the agricultural land use of Tripoli

However, although Professor C Valle's master plan was based on the previous Italian master plan, it gave the Municipality of Tripoli the option to modify the plan according to the new requirements of the city development

In 1966, the Ministry of Planning and Development agreed in a preliminary report to a master plan for Tripoli and its metropolitan area [2] Although the report is general and is not based on lot by-lot study, it throws some light on the future trends of the urban development of Tripoli (Fig 9 5) The report has also made several suggestions for the re-development of the central business district One of these suggestions is re-development of the Arab residential areas (Belkheir and Mizran quarters) which now occupy the middle and western parts of the central business district Re-development is of vital importance for the growth and expansion of the central business district (Fig 9 2) The existence of

Figure 9 2


PROPOSED URBAN RENEWAL FOR THE CENTRAL BUSINESS DISTRICT
TRADITIONAL HOUSES NEEDING REDEVELOPMENT
MODERN BUILDINGS
OLD TOWN NEEDING SPECIAL TREATMENT
OPEN SPACES
CBD BOUNDARY
CASTLE
MOSLEM CEMETERY
MIDDLE ZONE
N
0 100 500 800 M

such quarters with their mediaeval plan impedes the traffic flow because of the narrowness of the streets Apart from the backward mediaeval plan, the dwellings are old and slums have started to emerge

Other proposals have been made for the recreational areas of Tripoli along the sea shore as well as for the necessity for the existence of parks and open spaces in the residential areas

9 4 THE FIRST MUNICIPAL PROGRAMME (1963-67)

In 1963, the Municipality of Tripoli started to proceed with a series of planning programmes in an attempt to carry out its five year plan (1963-1968) The reason was to implement its existing master plan which was laid down by Professor C Valle The Municipality wanted also to do something to improve the urban facilities within the city The first planning programme carried out by the Municipality was the building of a new wholesale market to the east of the Wadi Mejenin away from the core of the central business district This new market "Suk el Tulatah" or Tuesday market replaced the old and traditional wholesale market which existed to the north of the central business district The new wholesale market covers an area of 200 hectares and was designed by Italian architects and cost the Municipality more than £L 2,000,000 for its construction It is the largest wholesale market in the country (see Chapter 4)

Moreover, the Municipality built in 1968 another retail market in Dahra quarter with more than 100 shops of various kinds such as greengroceries, butchers, grocers, fishmongers, etc The new market serves the five residential quarters of Dahra, Shara el Kebir, Zawiet el Dahmani, Shara el Shatt and Shara Ben Ashur, comprising 59,774 inhabitants in 1964

In 1964, the Municipality constructed 400 rooms on the municipal beach These are reserved for its customers for £L 16 per month for a single room

Road construction also gained a great deal of attention by the Municipality which built a series of new roads in Shara el Zawia, Shara el Bay and Gurgi areas, and widened a number of existing ones such as Mohammed Ali Essanussi, Shara An Nasr and Shara Triq es Sur

All these various programmes cost the Municipality £L 6,048,013, including sums paid in compensation for old properties and land acquisition

Other Government Programmes

The Ministry of Public Works has also participated in the urban development of Tripoli Between 1964 and 1968, it spent £L 5,950,000 on a new sewerage system, and another £L 1,800,000 on a Sewerage Purification Project in the Hadba el Khadra to the south of Tripoli (3)

The aim of this contribution on the part of the central Government had various aspects First, the Government wanted to improve the condition of the existing sewers which were constructed during the Italian rule Secondly, the Ministry constructed new sewers in the new residential areas Thirdly, it wanted to keep the sea water free from pollution Finally, sewerage water could be purified by the Sewerage Purification Works and utilized for agricultural purposes, where about 10,000 hectares could be irrigated for summer and winter crops

9 5 THE SECOND FIVE YEAR PROGRAMME

The second five year programme (1968-1972) which is being carried out by the Municipality of Tripoli is more ambitious than the previous municipal programme The objectives of the present five year plan are the completion of the previous one and creation of more urban facilities within the city This arises from the rapid growth of residential areas, the increasing number of vehicles and the improvement of the standard of living Political rivalry between Benghazi and Tripoli is also significant

Therefore the Municipality wanted to eliminate all urban backwardness in some parts of the city, and to create better urban conditions within these parts so that the local authority will not be embarrassed by poor urban facilities compared with North West African cities such as Tunis, Algiers and Casablanca

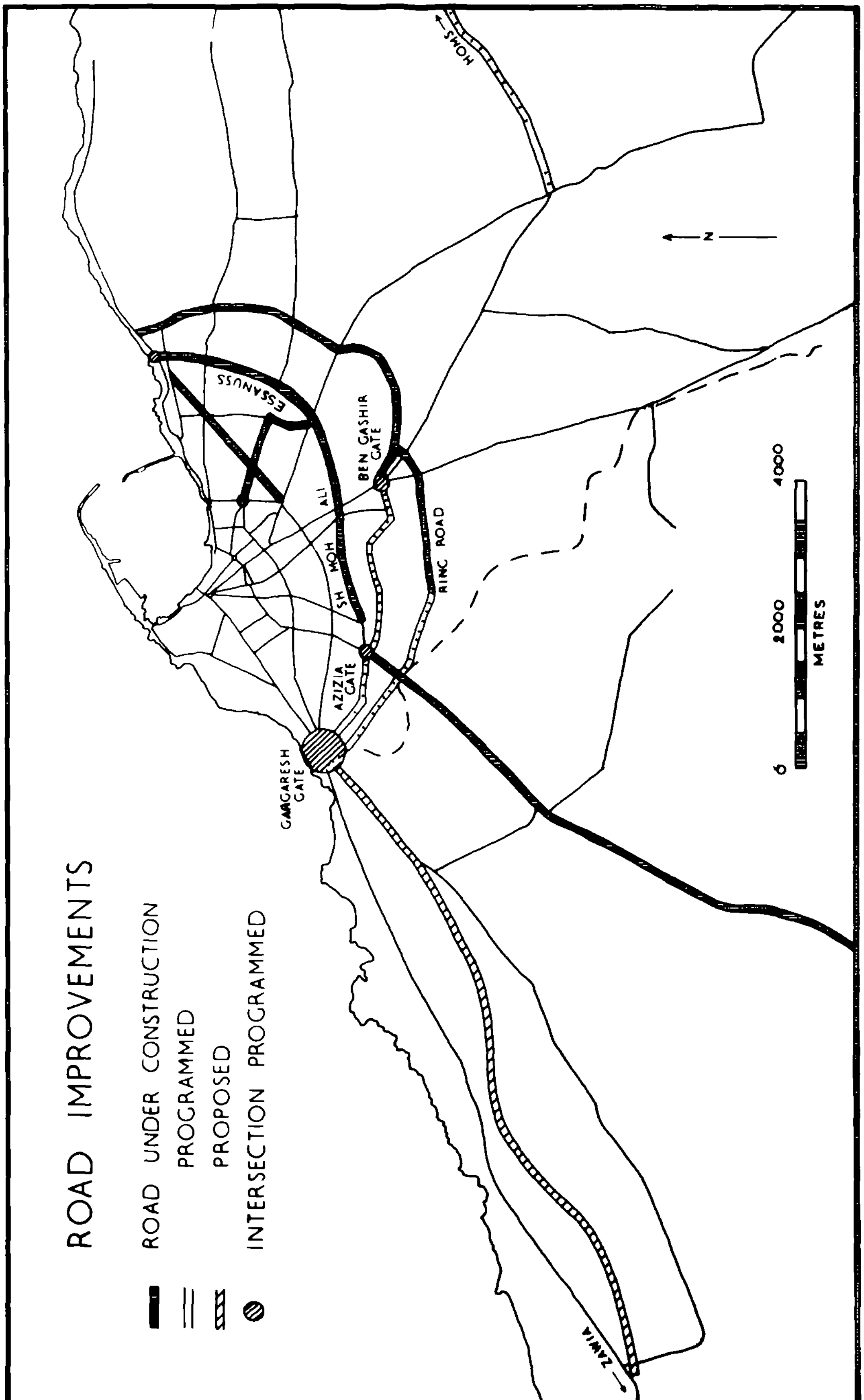
Further, the success achieved by the Municipality in implementing its five year programme has encouraged it to attempt to carry out this new five year plan, which will cost the Municipality more than £L 20 millions (an average of £L 4 millions per annum) The programme includes 30 schemes, varying from the construction of roads, streets, sub-ways and the improvement of the present intersections to other civic schemes (Appendix V Table 1) The expenditure needed for the plan will be subsidized by the Central Libyan Government since without such financial help, it would be extremely difficult to find such an amount of money from its own revenues

Nine city quarters will be affected by the second municipal five year programme, six of those are located within the middle zone and the rest lie within the outer zone The implementation of such a programme will cost the municipality £L 8,721,000 The re-development will concentrate on replanning the streets of the residential areas, maintaining the existing ones and providing urban facilities and amenities for each residential area This is necessary because of existing conditions of these residential areas in terms of poor street planning and lack of well-maintained public facilities, all needing special re-development and general co-ordination

About £L 2,490,000 have been allocated for the development of the main intersections of Tripoli such as Azizia Gate, Ben Gashir Gate and Cargaresh Gate It is intended to improve the traffic flow through these gates particularly during rush hours (Fig 9 3)

Another £L 250,000 will be spent on the construction of sub-ways within the main streets of Tripoli particularly in the Shara Omar el Mukhtar and Shara el Rashid, where heavy pedestrian traffic is found This will help to relieve the traffic jams and hold-ups within the busiest streets of Tripoli city

Figure 9 3


ROAD IMPROVEMENTS
ROAD UNDER CONSTRUCTION
PROGRAMMED
PROPOSED
INTERSECTION PROGRAMMED
HOMS
N
ESSANUSS
BEN GASHIR GATE
SH MOH ALI
RING ROAD
AZIZIA GATE
GARGARESH GATE
ZAWIA
0
2000
4000
METRES

Four of the municipal projects are intended for recreational purposes, for which about £L 3,110,000 have been allocated The Municipality will create a recreational zone along the sea coast between the Ministry of Industry and the city's eastern boundary A sea wall is to be erected along the coast together with a promenade and a boulevard The second project is similar to the previous one It is intended to establish a recreational area between the Electricity Station and the Military beach The third project is the creation of a public park near the Gargaresh Gate on two hectares of municipal land The fourth project intends to establish a zoo to the south of Tripoli on an area of 100 hectares

Other programmes

These will include the provision of various urban facilities such as a sewerage system and street lighting, as well as for general maintenance of the Old Town

Apart from the above-mentioned programmes, the Municipality of Tripoli is to redevelop two municipal hotels (Del Mehari and Grand Hotel) in an attempt to solve the accommodation problem facing tourists and foreign visitors during their stay in Tripoli

All these municipal projects will create better urban facilities within the residential areas of Tripoli Traffic problems will be solved or reduced by new roads, by maintaining the existing ones, and by the improvement of the main intersections Construction of sub-ways will be of great help to pedestrians Projects related to the creation of recreational areas along the sea coast will make the city and its harbour more attractive

9 6 SOME PROBLEMS FACING FUTURE CITY PLANNING

Although the first municipal five year programme helped tremendously to improve the city's physical environment, and although the second five year plan will create better urban facilities and various amenities within Tripoli, there are still other problems which demand solutions These planning problems will be examined by the writer so that the Municipality of Tripoli will be aware of them

1 Height and layout of buildings

In order to regulate the height and layout of buildings, the city's local authority should adopt more practical measures relating to the layout and height of such buildings within the central business district, middle and outer zones The central business district, for instance, should have more than five storey blocks (the maximum which are allowed) to save land There are so many old buildings and traditional houses which consist of one storey and these could be replaced by tall buildings These proposed new buildings could accommodate more shops and offices

Permission should be granted for private developers to erect more than five storey buildings in the northern part of the middle zone so as to make it easy for the central business district to encroach southwards The same permission should be given in Arab residential quarters to erect tall buildings within the commercial areas of these quarters

In short, new regulations concerning height and layout should be introduced to encourage erection of tall buildings in any suitable sites for commercial or residential uses

2 Street planning and traffic problems

Streets and roads should be replanned again in order to cope with the increasing number of cars and vehicles Most of the streets are narrow and old and were originally agricultural routes The recent urban growth of the residential areas did not bring about a modern development in street and road planning This is exemplified in most of the Arab residential areas such as Shara el Kebir, Shara el Zawia etc Here the streets are narrow (4 metres wide), unasphalted, and inconvenient for modern traffic Apart from absence of planning, the untarred and unsurfaced roads impede all modern means of transport, not to mention the dust and dirt which causes irritation to pedestrians

The existing street pattern of Tripoli should be organized in order to make the traffic system function more properly In other words, both the Ring Road, Shara Mohammed Ali Essanussi and Shara Am Nasr roads should contribute more effectively to reducing the heavy pressure exerted on the central business district which has become congested with traffic generated to the west of Tripoli Other roads connecting the central business district with the middle and outer zones require re-development The existing main roads are by no means adequate to cope with the heavy traffic entering the city for shopping or entertainment

Other existing streets located within the central business district need a careful and comprehensive study in order to enable the local authority to regulate the traffic generation and flow More effective measures must also be undertaken to reduce the number of primitive means of transport and to regulate these to function more properly within the central business district

Other local streets are also in need of regulation and connection with the main streets so that the residential areas can have a satisfactory traffic system

The existing parking places are inadequate especially during working hours This is due partly to the narrowness of the major streets and their poor planning, and partly to the increasing number of vehicles within the city Parking places should be provided throughout the central business district

3 <u>Slum clearance and urban renewal</u>

There are so many residential quarters which have begun to exhibit a slum appearance, particularly in parts of the Old Town Others can be found in the old residential areas of Mizran, Belkheir, Dahra, Shara el Zawia and Shara el Bay (Plate 9 1) All dwellings which are found within these quarters are passing through a phase of deterioration and dampness, becoming generally unsuitable for habitation (Fig 9 2) Some of these houses, particularly those in the Old Town are structurally very weak and need re-development (see Chapter 6)

The local authority should examine all these old dwellings and adopt a practical policy towards slum clearance Some of these dwellings are more than two hundred years old and they are becoming unfit for human habitation The local authority is aware of the general condition of these dwellings, but they feel they cannot do anything about them because they are privately owned

4 Overspill population

There are more than 30,000 people living in the Shanty Town and other shanty areas within Tripoli More than 10,000 households are regarded as overspill population, since they have no proper accommodation Therefore the local authority should provide decent accommodation outside the city boundary in the Hadba el Khadra where the first stage of Idris Housing Scheme is under construction Thus there is an urgent need to rehouse the overspill population of Tripoli in order to solve the problem of the Shanty Town, otherwise the number of the overspill population will increase in the next ten years and will create a serious social and economic problem for the city It is possible that under these conditions the overspill population of the Shanty Town and other slum areas will increase unemployment and the tendency to delinquency and crime

Therefore a full survey of the overspill population is of vital importance in order to delineate the problem This is necessary for overspill population who are living in the Shanty Town as well as in the congested residential areas of the Old Town and other Arab quarters

5 Need for reducing the housing densities

Housing density per hectare is relatively high particularly within the residential areas of the Old Town, Belkheir, Mizran, Shara el Zawia quarters and Ras Hassan area Here more than one hundred houses are located within one hectare with little or no provision for open spaces, wide streets, and parking places The Municipality of Tripoli should enact regulations restricting the number of houses to be erected within a particular hectare so that open spaces and wide streets as well as urban facilities can be established

6 Recreational areas

A green belt should be created within the southern part of Tripoli along the whole Wadi Mejenin course A part of this green belt was created by the Italians, and now occupies an area of 200 hectares This could be extended along the whole Wadi course in order to create an afforested belt in an attempt to protect the built-up area from the wadi floods and the Ghibli winds which carry a great amount of sand Further, the green belt could provide a recreational area for the population of the city An extensive afforestation within the south of Tripoli is of great importance as a green belt and protection for Tripoli against mobile sands

Public parks in every residential quarter should be developed in order to provide recreational areas for the inhabitants At the present there are only six public parks, three of which are located along the sea coast, with another two within the central business district There is a need for at least one public park in every residential area

The sea-side areas along the coast of Tripoli should be reserved for public parks The Italians did marvellous things for Tripoli by creating public parks along the sea coast from the Spanish mole to the Karamanli mole These public parks and green belts should be continued from the Karamanli mole to the eastern boundary Another green belt with public parks could be created along the sea-side between the Spanish mole and the western boundary with some allowance for beaches

In short, the creation of such a green belt with parks will beautify Tripoli's sea coast, as well as enable the population of the city to enjoy fresh air, sunshine and the panorama of the sea

7 <u>Embankment of the Wadi Mejenin</u>

The embankment of the Wadi course to the south of Tripoli and Gurgi area is of crucial importance for the protection of the built-up area from the floods of the wadi, particularly during years of high rainfall For example, in 1946, 1958, 1962 and 1966, the flood water of the wadi submerged all nearby dwellings of the Ben Gashir and Shanty Town (see Chapter 1) Damage was also reported for other non-residential buildings Moreover, the wadi, in many cases, destroyed the bridges of the Suani Road and Gargaresh Gate

The local authority should therefore take the necessary measures to protect the built-up area of Tripoli and the Shanty Town as well as the agricultural lands near the wadi banks from floodings

8 Industrial sites

Suitable sites for industrial firms should be allocated within the outer zone of Tripoli along the Suani Road Here the industrial zone is away from the residential areas and has access to the middle and central business district Therefore the local authority should not allow any industrial firm to be established either within the central business district or in the middle zone The exception should exclude only the existing sites of mechanical and wood workshops which could be allowed to remain within the middle zone in particular sites

Other areas in the central business district, which are now occupied by industrial firms such as textile and brick factories, should be removed so that the central business district is only allocated to function for commercial and business activities Some old industrial sites should also be removed particularly those situated within the middle zone such as olive oil and paper industries near the Gargaresh and Ben Gashir Gates

9 Oil companies' reservoirs and garages

The two large areas located within the middle zone in the

Shara el Kebir and occupied by petroleum reservoirs should be removed from their present sites away from the residential areas The reason for this is the fact that the locations of such reservoirs within the middle zone endanger the residential areas in case of fire Similarly, there are numerous garages for trucks located along Mohammed Ali Essanussi road, and these should also be removed from the residential areas and resited within the outer zone The location of such garages creates inconvenience to the nearby residents The local authority should therefore take appropriate measures to remove these garages, the sites of which could be transferred to residential or recreational uses

10 Commercial areas

Commercial sites which are located within the Arab residential areas should be re-organized in order to function efficiently and cope with the increasing commercial activities of the shopping centre The existing situation is exemplified in the numerous foodstuff shops which are over the actual needs of the residential areas Other kinds of shops should be allowed in order to create small shopping centres catering for the population's daily requirements In others, the Municipality of Tripoli should take proper measures which restrict issuing commercial licences within the residential areas taking into account variation of shops of different kinds of retail trade

11 Government buildings and military barracks

Government buildings and offices located within the commercial streets should be removed to more suitable sites within the middle zone away from noise and heavy traffic The Tripoli International Fair could be removed to a larger site within the outer zone to allow for further expansion Its present location is unsuitable being sited near the core of the central business district, and its floor area is insufficient for further commercial expansion

The military barracks located within the middle zone near Bab Azizia Gate in the Shara el Srim quarter are by no means in suitable sites The present barracks could be converted to other functions such as a school or hospital which could provide more needed services

12 Agricultural lands

Some Arab farms and gardens which are located within the eastern and south-eastern parts of Tripoli, should be conserved in order to supply the city with its requirements of green vegetables and fruits The recent urban growth within the city has absorbed a high proportion of these gardens and Arab farms The remaining cultivated land must be conserved for agricultural use The local authority should be aware of increasing pressures upon the owners of these farms from speculators who take a keen interest in buying and selling land The less agriculturally productive land or open spaces could be developed for urban use Strict and tough measures should be undertaken by the local authority towards enactment of an effective policy of conservation of cultivated land (Plate 9 2)

In short, the importance of these farms for the city is not only due to their economic use, but also because they help to preserve a green belt around the built-up areas of Tripoli

13 Port of Tripoli

During recent years shipping in the Port of Tripoli has increased enormously owing to the increase in commercial and industrial activities of the city The port is subject to heavy pressures of unloading goods for the oil companies as well as for military equipment It has become difficult under present conditions for the port to cope with the increasing volumes of goods (see Chapter 5) Thus, the formulation and establishment of an overall plan for expanding the port facilities is a matter of urgency In view of the present conditions of the port, the Ministry of Planning and Development is going to undertake a series of planning schemes related to the port and its harbour so that the port can function satisfactorily in the next twenty years or so in dealing with the increasing commercial cargo The urgent building items proposed can be summarized as follows (4)

(a) Enlarging at least two berths for a relatively large depth of water

(b) Grain silos

(c) Cold-storage installation

(d) Animal quarantine station

0 200 400 600 800
metres

-N-

Plate 9.2 Agricultural land use within the middle zone, which constitutes a part of the green belt around the built-up areas.

The long-term master plan is shown in Fig 9 4 This plan will include the following

(1) Improving the existing general cargo facilities of the Spanish mole with other provisions and facilities for commercial and industrial uses

(2) Establishment of two general berths to the south-east of the harbour to be used for car ferry berths and passenger berth

(3) Improving the condition and installations of the Karamanli mole to the east of the harbour with provision of an oil berth, a bulk cargoes berth, a reserve oil berth, and an area allocated for grain silos, sacking stations etc

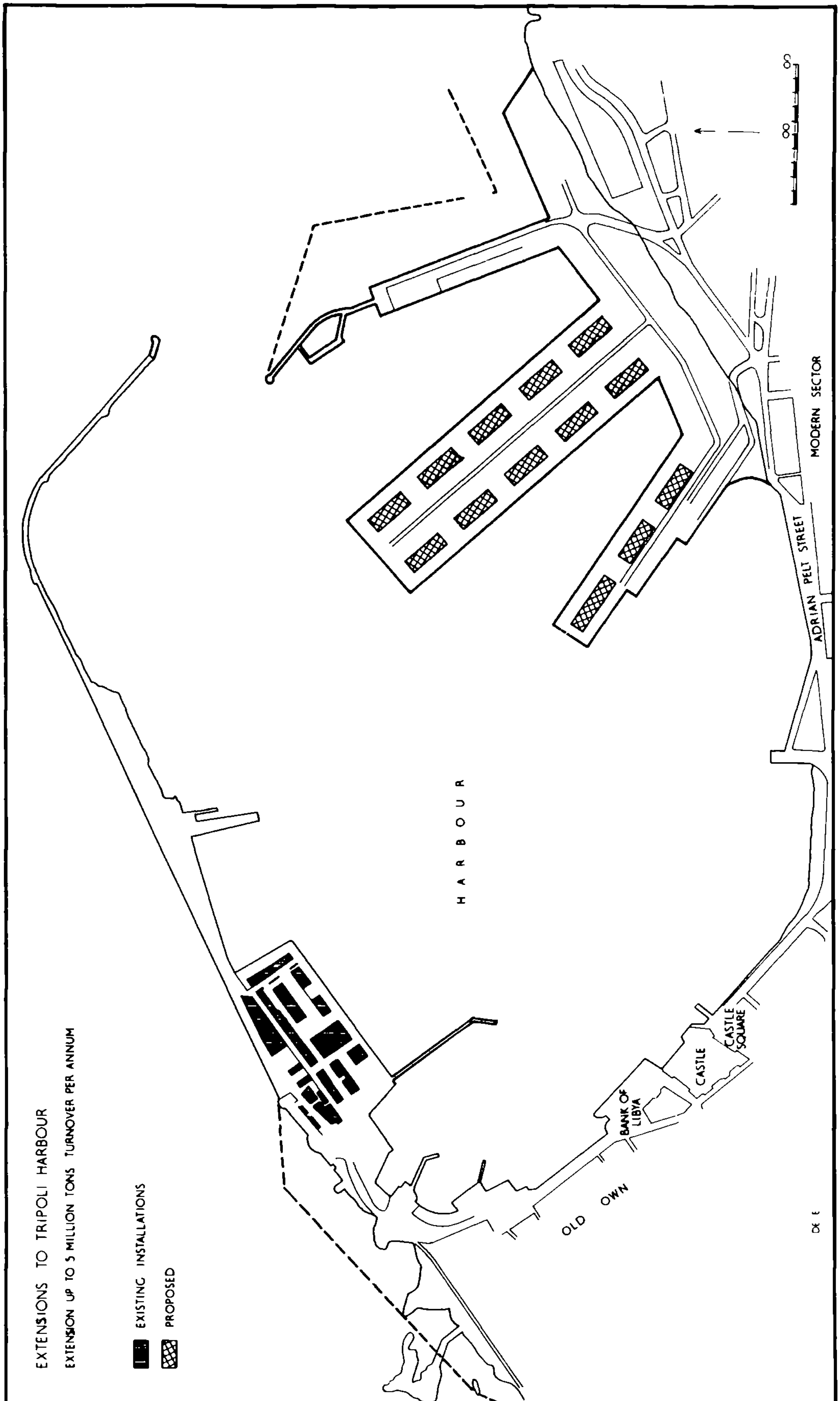
All these schemes will increase the port's efficiency in coping with the increasing number of commercial and industrial goods imported from abroad

Work on the above schemes has started in 1967 and will be completed in 1971 (Fig 9 4) The cost is estimated at £L 7,000,000 (5)

14 <u>A need for master plan</u>

It is absolutely essential for Tripoli to have a recognized master plan in order to organize the existing pattern of land use as well as to direct the future pattern of land uses within the next twenty years This plan must cover every lot and building in order to determine its present and future functions The plan must take into account all considerations

Figure 9 4


EXTENSIONS TO TRIPOLI HARBOUR
EXTENSION UP TO 5 MILLION TONS TURNOVER PER ANNUM
EXISTING INSTALLATIONS
PROPOSED
HARBOUR
MODERN SECTOR
ADRIAN PELT STREET
CASTLE SQUARE
CASTLE
BANK OF LIBYA
OLD OWN

concerning overspill population, industrial sites, residential areas, recreational zones as well as the central business district It should also include all aspects of traffic problems and traffic flows in order to make the existing roads and streets function properly and cope with the increasing number of vehicles

Agricultural land use should be allowed to exist and to function with a special allowance for urban development to take place for residential use on less productive land (Fig 9 5)

15 A need for regional planning

A regional plan for both Tripoli and its metropolitan area in the Suk el Juma district is also of crucial importance owing to the fact that there are socio-economic ties between the two areas (Fig 9 6) This relation is exemplified in the fact that a high proportion of the working population of Suk el Juma have permanent jobs in the Government offices, oil companies and trade, apart from the secondary school students People make daily trips from their homes to work places in Tripoli either by their own cars or by public transport Moreover some people in the Suk el Juma district do their weekly shopping in Tripoli or come to the city for medical treatment in Tripoli's hospitals and clinics

On the other hand, some of the working class population of Tripoli have their jobs in the industrial firms situated within the Suk el Juma district In addition, the Suk el Juma is one of the major agricultural regions of the Jefara plain, supply-

Figure 9 5

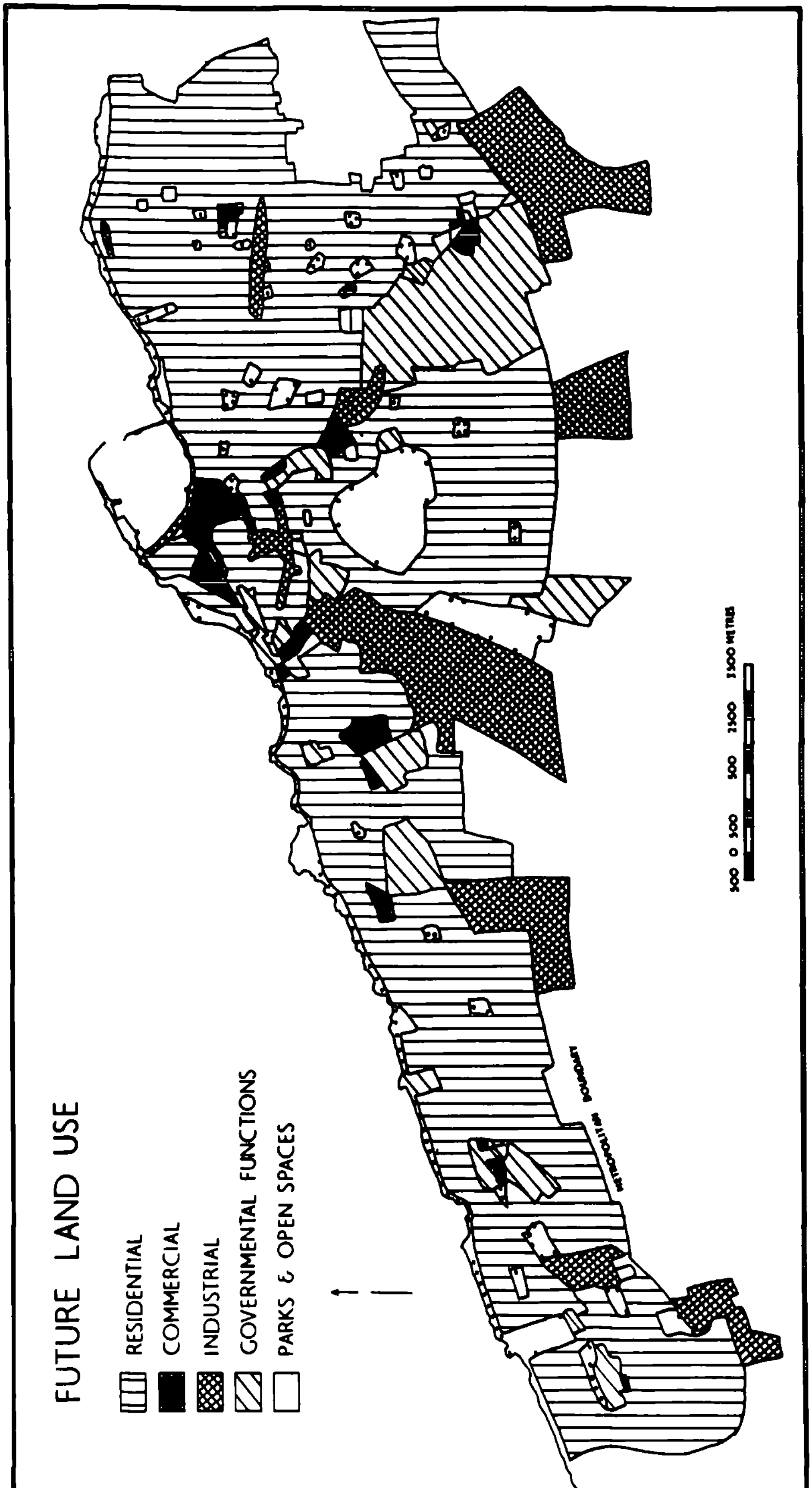
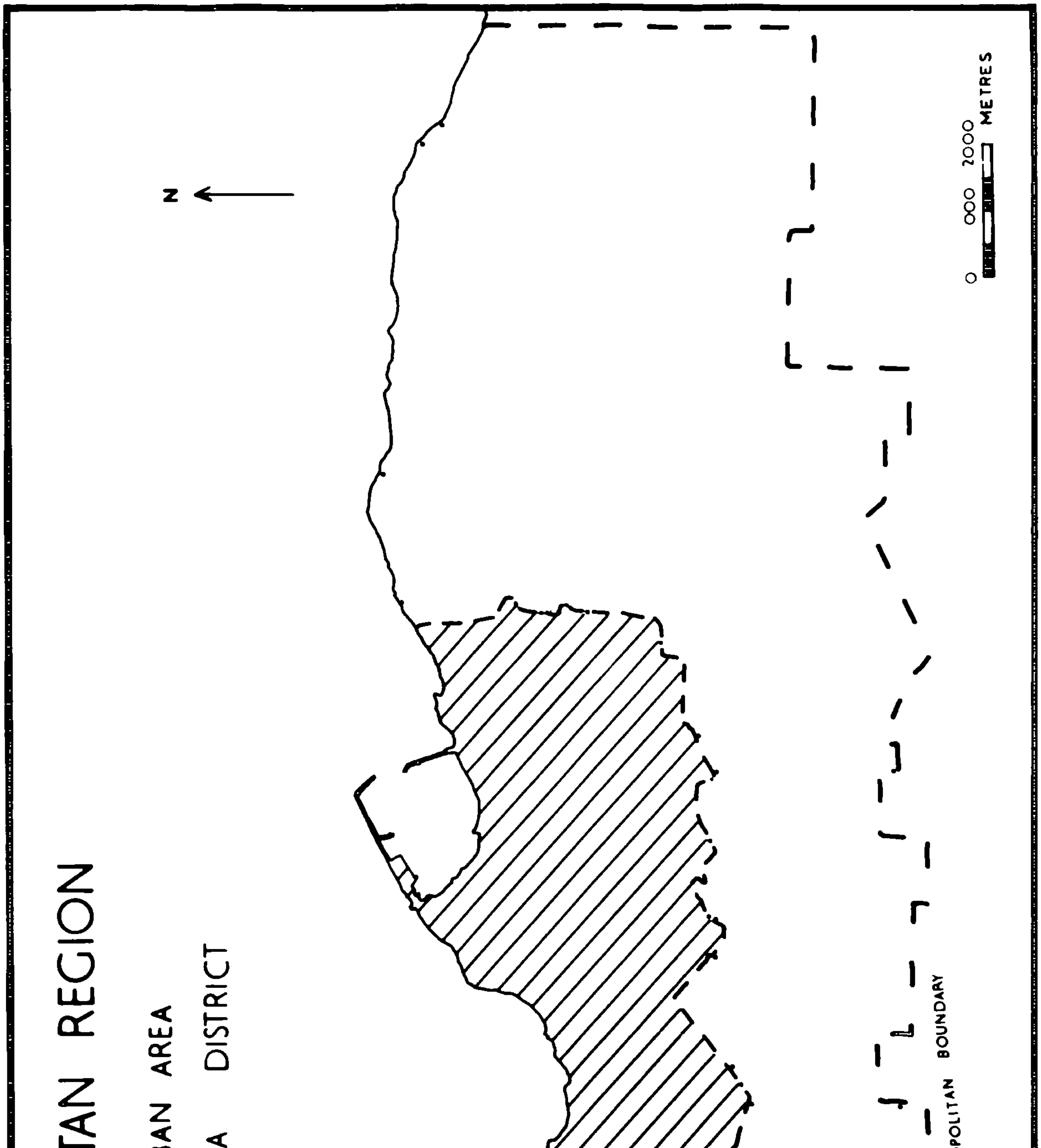

FUTURE LAND USE
RESIDENTIAL
COMMERCIAL
INDUSTRIAL
GOVERNMENTAL FUNCTIONS
PARKS & OPEN SPACES
METROPOLITAN BOUNDARY

Figure 9 6


METROPOLITAN REGION
TRIPOLI URBAN AREA
SUK EL JUMA DISTRICT
N
0
2000
METRES
METROPOLITAN BOUNDARY

ing the city with green vegetables, fruits and milk

All these spatial factors and the socio-economic ties existing between the city and its metropolitan area should be examined carefully in any general framework for regional planning

In other words, the future land uses of Tripoli must be examined together with the land uses of the Suk el Juma which are at large agricultural area The overspill population could be rehoused in the Suk el Juma area particularly in the Hadba el Khadra, where the Government owns more than six hundred hectares of vacant land Similarly, the industrial firms of Tripoli city requiring large and open spaces could be located within the metropolitan area, because Tripoli cannot absorb the future rapid expansion of the residential and industrial areas without diminishing the agricultural lands, which constitute a part of the green belt On the other hand, the city will be congested if the local authority allows more speculation in the land market to take place

Conclusion

As we have seen, the absence of a recognized official master plan by the local authority makes Tripoli subject to uncontrolled urban expansion which could lead ultimately to the diminution of the agricultural lands, and the disappearance of the green belt

The municipal programmes achieved or in progress, are chiefly concentrated on creating social amenities and improving the function of the existing streets and roads These programmes will not provide a blueprint for Tripoli other than creating a better physical environment for the population of the city Therefore a carefully devised and flexible master plan for Tripoli is of crucial importance for the next twenty years It necessitates detailed research work on each plot within the city in terms of its present and future functions as well as studies of population densities, composition and growth in order to comprehend all forces operating on the future land use of the city

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2 Ministry of Planning and Development, Master Plan for Tripoli Urban Area, Vol II, Tripoli, 1967, p 35

3 Howard Humphreys and Sons, Tripoli Metropolitan Region Sewerage and Surface Water Drainage, Project Report No 1, London, 1964, p 23

4 Ministry of Planning and Development, Extension of Tripoli Harbour, Report No 2, Tripoli, 1966, pp 11-13

5 Ibid, p 11-13

CONCLUSION

The urban growth of Tripoli is the city's most striking feature, the built-up area has expanded widely and has been multi-directional especially to the west, south and south-east This, as we have seen, is related mainly to Libya's recent and very rapid economic development

Four major phases in the urban growth of Tripoli have been recognized First, the Phoenician, Roman, Arab and Ottoman periods in Libya have resulted in the emergence of the Old Town which completed its ultimate urban development at the end of the nineteenth century Secondly, the Italian colonization led to the creation of new sectors within the Menshia area This Italian phase of urban development extended throughout the whole central business district and part of the middle zone Thus the Italians created a new European city based on modern Italian concepts of town planning Thirdly, Independence in 1951, was significant in stimulating the urban growth of the city and the beginnings of residential expansion, particularly within the middle zone Finally, the phases of oil exploration (1956), discovery (1959) and production (1961), have enhanced the urban growth in general and housing expansion in particular, taking place mainly within the middle and outer zones of the city

This latter phase is the most important in the historical growth of the city owing to the availability of large capital sums and rapidly expanding demands for accommodation These contemporary processes of urban growth operating within the city are creating a vast housing expansion within the middle and outer zones, as well as leading to a greater mobility of the population from the inner zone (the Old Town) and the central business district to other districts in the city further away from the old centre In other words, the inner zone and the central business district are being depopulated as a result of the increasing demands for commercial and business premises in the city centre

As a result of this present phase of rapid urban development, the economic functions of Tripoli are more significant than its political role The growth of the shopping centre and expansion of the central business district have enhanced the commercial and business activities within the city This burst of prosperity has arisen because of the impact of the oil industry, the influx of foreign capital, and increasing government expenditure The above factors have also led to the formation of a class of local entrepreneurs which has stimulated various kinds of industrial activities such as the food processing, textile, building, chemical and steel industries Thus local production has expanded as the demand for all manner of products increased - not only in

Tripoli city itself but also in the country as a whole

The rapid increase in the number of vehicles within the city has created numerous traffic problems These are more acute during the working hours and especially so in the early morning, at lunch times and between 5 and 6 p m Shortage of parking facilities, lack of wide streets and efficient facilities for the direction of traffic, are the basic causes behind the congestion in the city

Demand for accommodation by the in-migrants, Government officials, employees of the oil companies, the Diplomatic Corps, and families of U S A F officers working at the Wheelus Field, has created an acute shortage of housing Owing to the inadequate number of dwellings, rents have risen within all residential areas The rate of house building between 1951 and 1966 did not keep pace with the increasing demand for accommodation As a result, the Shanty Town emerged, and slums developed with deterioration, dampness and congestion, particularly within the Old Town Although the Idris Housing Scheme is an important step towards solving the problem of shortage of accommodation, particularly within the quarters containing families with limited incomes (especially those of the Shanty Town), it will not completely solve the problem of the housing shortage

The population of the city, due to natural increase and in-migration nearly doubled between 1954 and 1964 This rapid increase raised the population densities in all the urban zones of the city, particularly in the middle and outer zones In-migration has also increased the number of unskilled workers in secondary and tertiary activities

The urban land uses within Tripoli have expanded in various directions at the expense of the agricultural areas, especially within the middle zone and the outer zone Very fertile farms were transferred to urban uses by land speculators, which resulted in the disappearance of green spaces and productive Arab gardens Emergence of the central business district has given rise to high concentration of commercial and business activities, resulting in the rise in rents for shops, offices, and other premises

Tripoli was originally planned by Italian town planners during their rule in Libya However, the recent unforeseen urban developments, the increasing population and the need for more urban facilities together with the growing number of vehicles, have created various and altogether new planning problems The most important of these is the existence of the Shanty Town to the south of Tripoli and the need for more housing Lack of adequate urban amenities, recreational areas and open spaces are other planning problems facing the city The redevelopment of certain parts of the city centre is of crucial importance for the expansion of the central business district and for facilitating the traffic flow In addition, suitable sites must be found for industries Other planning problems were examined thoroughly in Chapter 9 However, all these problems have to be solved on the basis of accurate data, objective analysis and adequate planning

APPENDIX I

Table 1(A) TOTAL VALUE OF IMPORTS OF THE KINGDOM OF LIBYA FROM ALL COUNTRIES BY COMMODITY SECTIONS SEPARATELY BY YEARS 1955 1966

Value in £L (000)

Commodity Section Description	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Food & 1 ve animals	4 342	4 651	5 841	4 969	5 784	6 623	7 057	7 623	10 152	13 436	14 555	19 651
Beverages & tobacco	233	197	396	369	481	541	648	724	875	1 040	1 112	1 523
Crude materials inedible except fuels	365	494	580	548	733	1 018	963	1 408	1 513	1 973	2 501	3 783
M neral fuels lubr cants and related materials	1 435	1 080	1 944	1 665	2 101	3 271	3 201	2 757	3 153	4 738	4 501	5 697
Animal and vegetable oils and fats	232	445	281	140	323	414	675	78	790	1 721	106	1 456
Chemicals	719	944	1 756	2 677	3 291	4 698	3 974	5 077	5 519	6 579	6 415	6 902
Manufact red goods classified chiefly by materials	3 382	4 191	6 031	7 471	8 467	13 725	12 463	19 620	22 116	25 325	29 351	32 909
Machinery and transport equipment	2 150	2 955	8 535	12 960	14 640	24 315	18 226	29 440	32 718	39 322	41 540	54 497
Miscellaneous manufactured articles	1 479	1 643	2 702	3 702	4 765	5 781	6 067	6 715	8 424	10 240	14 332	18 239
Commodities not classified	1	1	10			1	2	2	17	5	3	5
Total	14 338	16 601	28 076	34 501	40 585	60 388	53 276	73 444	85 277	104 379	114 416	144 662

Source An Analysis of the Value of Imports of the Kingdom of Libya 1955 1966
Census & Statistical Dept
Ministry of Economy & Trade
Tripoli 1967

Table 1(B) PERCENTAGE DISTRIBUTION OF TOTAL VALUE OF IMPORTS OF THE KINGDOM OF LIBYA FROM ALL COUNTRIES BY COMMODITY SECTIONS SEPARATELY BY YEARS 1955 1966

Descr ption	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Food & L ve Animals	30 28	28 02	20 80	14 40	14 25	10 97	13 25	10 38	11 90	12 87	12 72	13 58
Beverages & Tobacco	1 62	1 18	1 41	1 07	1 19	0 90	1 22	0 99	1 03	1 00	0 97	1 05
Crude Materials inedible except f els	2 55	2 98	2 07	1 59	1 81	1 69	1 81	1 92	1 77	1 89	2 19	2 62
M n al f els l bricants & related m terials	10 01	6 50	6 93	4 83	5 18	5 42	6 01	3 75	3 70	4 54	3 93	3 94
Animal & veg table oils and fats	1 62	2 68	1 00	0 41	0 79	0 68	1 27	0 11	0 93	1 65	0 09	1 01
Chem cals	5 01	5 69	6 25	7 76	8 11	7 78	7 46	6 91	6 47	6 30	5 61	4 77
Man fact red goods class if d chiefly by materials	23 59	25 24	21 48	21 65	20 86	22 73	23 39	26 72	25 93	24 26	5 65	22 75
Mach ery & tra spo t Eq ipme t	15 00	17 80	30 40	37 56	36 07	40 26	34 21	40 08	38 37	37 68	36 31	37 67
Miscell eo s ma fact red a ticl	10 31	9 90	9 62	10 73	11 74	9 57	11 38	9 14	9 88	9 81	12 53	12 61
Commodit es not classif ed	0 01	0 01	0 04			0 00	0 00	0 00	0 02	0 00	0 00	0 00
Total	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00
Total val e in £L (000,000)	14 3	16 6	28,1	34,5	40 6	60,4	53 3	73 4	85 3	104 4	114 4	144 7

So rce A A alysis of the V l e of Imports of the K gdo of Libya 1955 1966
Ce s s & Stat st al Dept
Mi stry of Eco o y & Trade
Tripoli 1967

Table 2 VALUE OF IMPORTS OF ALL COMMODITIES OF THE KINGDOM OF LIBYA BY PRINCIPAL COUNTRIES OF ORIGIN SEPARATELY BY YEARS 1955 1966

Value in £L (000)

	Name of Country	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1	Belgi m	214	382	185	313	605	724	586	1 986	1 325	1 181	1 434	2 301
2	China P R	NA	NA	NA	NA	NA	NA	NA	NA	NA	524	1 715	2 826
3	France	802	996	1 480	2 619	3 185	4 671	1 983	2 191	3 758	4 745	5 985	7 177
4	Germany W	1 462	1 733	2 261	2 743	3 933	7 102	6 978	9 929	10 778	11 238	11 726	14 882
5	Greece	110	97	92	118	201	322	288	323	567	931	1 314	1 625
6	Holland	695	823	949	1 323	1 388	3 180	1 886	3 553	2 936	3 213	3 327	3 474
7	Italy	3 832	4 969	7 694	7 696	8 726	11 373	11 928	17 668	17 541	20 953	29 019	39 980
8	Japan	185	60	139	318	485	761	1 017	1 536	2 552	3 008	4 299	4 517
9	Lebanon	56	34	81	70	91	191	155	174	297	430	1 367	3 607
10	Rumania	0	0	0	10	17	24	135	392	699	856	1 246	1 664
11	Spain	1	4	5	10	121	50	345	141	1 958	1 256	619	1 544
12	Tunisia		218	185	255	384	692	600	456	530	1 367	1 153	2 313
13	U K	3 591	3 663	5 886	7 632	8 787	12 809	10 342	13 514	15 213	18 454	16 974	22 195
14	U S A	245	599	4 612	7 390	8 423	12 580	10 196	14 243	17 029	24 173	19 517	18 156
15	Total for the 14 Countries	11 193	13 578	23 569	30 497	36 346	54 479	46 439	66 106	75 183	92 329	99 695	126 261
16	Other Countries	3 145	3 023	4 507	4 004	4 239	5 909	6 837	7 338	10 094	12 050	14 721	18 401
17	Total	14 338	16 601	28 076	34 501	40 585	60 388	53 276	73 444	85 277	104 379	114 416	144 662

Source An Analysis of the value of Imports of the Kingdom of Libya 195 1966
Census & Statistical Dept
Ministry of Economy & Trade
Tripoli 1967

Table 3 PRODUCTION AND SALES BY ELECTRICITY CORPORATION OF TRIPOLI (1954 - 1966)

Year	Total Production	Sales of electricity For Industrial & Lighting Purposes	
	kw. hrs.	Quantity in kw.	Value in £L
1954	40,405,226	16,404,751	415,482
1955	44,609,463	19,611,701	492,672
1956	47,395,126	21,974,376	557,245
1957	50,667,897	26,063,185	666,801
1958	54,299,754	28,571,182	730,257
1959	57,851,800	30,889,582	794,784
1960	68,035,123	36,485,174	933,108
1961	71,517,830	39,930,641	1,033,339
1962	93,014,994	43,044,429	1,104,254
1963	108,799,048	54,192,684	1,406,006
1964	126,475,345	65,501,724	1,705,472
1965	151,949,598	70,688,525	1,388,582
1966	182,371,078	78,421,885	1,532,126

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli 1966

Table 4 PRODUCTION OF ALIMENTARY PASTES

Production, Sales, Employments and Pay Rolls

(Factories of Alimentary Pastes (Macaroni, Spaghetti & Related products) 1954 - 1966 (Tripoli)

Year	Quantity of Alimentary paste produced in tons	Sales of Alimentary Paste		Average No of persons engaged	Total Wages & Salaries in £L
		Quantity in Tons	Value £L		
1954	1,999	1,980	132,759	77	8,829
1955	3,534	3,454	215,086	111	13,679
1956	4,301	4,184	259,105	108	16,390
1957	5,612	5,402	330,163	99	19,260
1958	6,248	6,160	351,862	121	26,959
1959	7,137	6,878	379,643	131	30,651
1960	9,427	9,178	507,556	167	41,779
1961	10,173	10,177	569,717	178	44,868
1962	14,072	13,559	758,134	182	47,861
1963	13,978	13,870	749,466	177	55,989
1964	15,584	14,398	860,601	189	72,228
1965	22,114	21,567	1,182,501	207	99,299
1966	25,421	24,611	1,382,665	206	110,885

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 5 MILLING OF CEREALS

(A) Production, 1962-1966 (Tripoli)

Year	Quantity produced in Quintals			
	Flour (cereals)	Semolina	Kuskus	Bran
1962	115,329	21,708	13,480	30,656
1963	118,229	4,573	3,523	18,918
1964	65,623	44,088	71,975	21,998
1965	55,898	55,866	94,600	23,618
1966	73,184	69,617	119,129	25,101

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 5 MILLING OF CEREALS

(B) Sales, 1962 - 1966 (Tripoli)

Year	SALES							
	Flour		Semolina		Kuscus		Bran	
	Quantity in Quintals	Value in £L	Quantity in Quintals	Value in £L	Quantity in Quintals	Value in £L	Quantity in Quintals	Value in £L
1962	113,231	413,300	21,753	125,331	13,470	80,629	33,232	70,656
1963	118,660	425,061	3,675	18,984	3,323	17,007	18,741	40,721
1964	84,466	302,125	43,210	215,333	70,073	346,744	22,140	48,015
1965	65,739	221,586	51,067	250,518	96,715	469,679	21,794	49,403
1966	74,245	241,110	71,479	339,311	117,886	557,191	25,556	54,474

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 5 MILLING OF CEREALS

(C) Employment and Pay Rolls, 1962 - 1966 (Tripoli)

Year	Employment and Pay Rolls	
	Average number of persons engaged	Total wages and salaries paid in £L
1962	86	23,199
1963	81	22,048
1964	81	31,556
1965	74	42,220
1966	94	49,369

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 6 MANUFACTURE OF SWEETS AND SUGAR CONFECTIONERY

Production, Sales, Employment and Pay Rolls, 1964-1966 (Tripoli)

Year	Quantity produced in Kg	SALES Quantity in Kg	SALES Value in £L	Average no of persons engaged	Total Wages & Salaries paid in £L
1964	1,346,132	1,326,188	268,623	109	37,843
1965	1,364,293	1,362,930	252,659	98	38,818
1966	1,980,198	1,904,724	335,901	117	46,236

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 7

TOMATO PRODUCTS

Production Sales Employment & Pay Rolls in Tomato Paste Industry

1954-1966 (Tripoli)

Year	Quantity of Tomato paste produced in Tons	SALES Quantity in Tons	Value in £L	Average No of persons engaged	Amounts paid in wages & Salaries in £L
1954	80	80	12 800	20	4,000
1955	123	123	19,237	30	7,200
1956	188	188	22,966	60	10 300
1957	393	393	66 400	110	18 500
1958	785	785	132,577	200	23,500
1959	2 692	1,403	246 460	520	37,307
1960	2 936	2 323	388,315	570	50,991
1961	5 010	4 769	786 347	760	73 471
1962	6 400	5,319	870,823	634	82,705
1963	5 107	6,260	1,022,941	358	75 234
1964	6 194	7 957	1 297,757	350	98,202
1965	10 175	7,430	1,195,532	415	145,918
1966	7 815	9 629	1 567,207	404	165,268

Source Statistical Abstract
Census & Statistical Dept
Ministry of Economy & Trade
Tripoli, 1966

Table 8 THE PRODUCTION OF MARINE WEALTH IN TRIPOLITANIA

1951 - 1964 (Tripolitania)

Year	Sardine in qt	Tunny in qt	Other species of fish in qt
1951	963,368	1,149,419	963,368
1952	1,466,141	1,003,976	1,466,141
1953	601,878	1,784,585	601,878
1954	1,141,687	832,949	1,141,687
1955	1,281,715	190,961	1,281,751
1956	1,133,306	1,399,519	1,133,306
1957	1,361,607	1,153,677	1,361,607
1958	1,244,688	1,799,980	1,244,688
1959	1,146,771	1,245,643	1,146,771
1960	1,216,722	732,779	1,216,722
1961	744,389	954,080	744,389
1962	574,920	466,413	574,920
1963	-	4,334,720	1,316,820

Source Dept of Fisheries,
Ministry of Industry,
Tripoli, 1967

Table 9 FISH PRODUCTS INDUSTRY

(a) Production of canned fish and other fish products (Tripoli), 1954 - 1961

	Quantity produced in Tons					
	Canned sardines preserved in oil in Tons	Canned tunny preserved in oil in Tons	Sardines preserved in salt in Tons	Tunny fish preserved in oil in Tons	Fish Oil	Other fish products
1954	15	183	46	20	8	31
1955	35	210	51	19	8	28
1956	35	414	129	51	16	9
1957	88	423	187	44	14	51
1958	105	308	158	25	12	77
1959	100	263	89	12	9	19
1960	233	323	71	17	8	48
1961	279	603	40	14	7	48

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1963

Table 9 FISH PRODUCTS INDUSTRY

(B) Sales of canned and other Fish products (Tripoli), 1954-1961

Year	Quantities sold of the following products in Tons						
	Canned sardines preserved in oil	Canned tunny preserved in oil	Sardines preserved in salt	Tunny fish preserved in salt	Fish Oil	Other Fish Products	Value of products sold in £L
1954	7	183	40	20	8	31	68,898
1955	17	210	27	19	7	28	72,957
1956	18	414	100	51	16	9	148,565
1957	35	443	159	44	14	51	166,652
1958	47	307	123	25	12	77	121,105
1959	43	263	62	12	8	19	94,903
1960	233	322	71	17	9	48	180,847
1961	279	602	40	14	7	48	255,273

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1963

Table 9 **FISH PRODUCTS INDUSTRY**

(C) Employment and Payrolls in establishment producing canned fish and other fish products (Tripoli), 1954 - 1961)

Year	Average number of persons engaged	Total amount of wages & salaries paid in £L
1954	731	48,129
1955	780	42,418
1956	972	51,971
1957	651	32,446
1958	918	48,123
1959	763	31,160
1960	1,129	45,071
1961	1,108	51,037

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1963

Table 10

PRODUCTION OF WINES

Sales, Employment and Payrolls in Wine Industry
1959 - 1966 (Tripoli)

Year	Quantity produced in litres	SALES Quantity in litres	SALES Value in £L	Average no of persons engaged	Amount paid in wages & salaries in £L
1959	1,995,331	1,340,100	90,971	53	12,116
1960	1,046,566	1,028,224	74,499	51	14,986
1961	1,044,238	1,603,746	94,707	51	17,465
1962	1,102,838	1,328,699	85,552	51	18,660
1963	1,488,800	1,086,320	78,700	62	20,568
1964	1,247,465	1,015,186	88,882	63	25,925
1965	688,404	798,566	85,525	56	22,175
1966	201,990	683,227	90,292	49	21,030

Source Statistical Abstract,
Ministry of Economy & Trade,
Census & Statistical Dept ,
Tripoli, 1966

Table 11 MANUFACTURE OF CIGARETTES AND TOBACCO

A Production of cigarettes cigars, tombac tobacco & snuff by the State Monopoly 1954 1966 (Tripoli)

Year	No Cigarettes	No Cigars	Cigarette Tobacco in kgs.	Tombac in kgs.	Chewing Tobacco in kgs.	Snuff in kgs.
1954	462 148,445	940 000	7 668	15 408	152,913	2,429
1955	555 363 805	725 000	4 286	16,698	89 188	5 208
1956	568,610,565	1 034,050	706	13,646	71,622	5,804
1957	604 478 260	1 226 800	1 785	24 736	93 063	4,947
1958	635,487 320	928 010	1 679	28,430	82,301	5,721
1959	583 110 720	1 321,590	614	40 024	121,232	7,013
1960	618 294 180	1 030 860		37,250	103 020	8 280
1961	687,948 780	1 104 200	-	44 833	110 093	9,981
1962	695,561 940	1 105,020		37 589	84 193	9,736
1963	746 034 200	1 441 000		38,939	77 545	9,761
1964	855,470 940	1 672,050	-	50 557	112,535	10,992
1965	917 042 200	1,268,000		59 663	111,190	12,484
1966	1 065 392 200	1 117 555	-	40 344	96,145	14 581

Source Statistical Abstract
Ministry of Economy & Trade
Census & Statistical Dept
Tripoli 1966

Table 11 **MANUFACTURE OF CIGARETTES AND TOBACCO**

B **Sales of cigarettes cigars cigarettes & piped tobacco tombac and snuff**
1954 1966 (Tripoli)

Year	Cigarettes		Cigars		Cigarettes & Pipe Tobacco		Tombac		Chewing Tobacco		Snuff	
	No	Value in £L	No	Value in £L	Quantity in Kgs	Value in £L	Quantity in Kgs	Value in £L	Quantity in Kgs	Value in £L	Q antity in Kgs	Value in £L
1954	467 315 045	260 994	971 000	4 134	8 343	2 686	15 277	4 098	157 213	4 120	2 191	457
1955	539 322 655	338 464	810 000	3 883	3 941	1 496	16 005	5 389	91 035	29 519	4 870	1 351
1956	587 325 125	415 797	992 050	4 417	965	408	14 381	5 410	70 931	26 802	5 560	1 465
1957	594 906 480	401 324	1 136 600	4 569	1 598	707	22 968	9 013	91 446	35 637	5 440	1 8 7
1958	629 132 570	429 447	1 067 810	4 440	1 723	921	29 136	11 711	86 600	36 788	5 614	2 286
1959	575 977 080	449 386	1 267 240	6 596	744	409	38 577	19 576	118 226	57 969	7 230	3 519
1960	631 347 600	522 962	993 783	6 490	37	21	38 436	20 805	101 315	53 392	7 958	3 834
1961	670 551 500	569 618	1 089 400	7 935			42 336	24 357	109 931	58 369	9 445	4 742
1962	694 618 980	664 852	1 158 820	7 106			39 076	25 914	86 806	57 233	9 443	6 093
1963	739 680 400	754 052	1 422 190	9 131			39 772	27 117	79 358	54 314	9 381	6 586
1964	856 850 240	893 566	1 644 620	11 271					112 701	89 521	11 332	7 991
1965	936 698 920	2325 894	1 332 400	9 948			58 322	44 558	109 562	86 999	1 587	8 213
1966	1045 283 333	2841 122	1 058 200	21 872			41 282	35 497	94 189	77 531	13 618	10 138

Source Statistical Abstract
Census & Statistical Dept
Ministry of Economy & Trade
Tripoli 1966

Table 11 CIGARETTES AND TOBACCO

(C) Employment and Payrolls, State Tobacco Monopoly (Tripoli)

Year	Average number of persons engaged	Wages and salaries paid in £L
1954	500	67,811
1955	449	68,985
1956	430	74,951
1957	351	77,774
1958	352	78,233
1959	343	94,496
1960	391	110,560
1961	450	122,851
1962	480	139,636
1963	476	148,271
1964	497	178,608
1965	507	199,228
1966	1,051	487,095

Source Statistical Abstract,
Ministry of Economy & Trade,
Census & Statistical Dept ,
Tripoli, 1966

Table 12 **BREWING OF BEER**

Production, Sales, Employment and Payrolls, 1954 - 1966 (Tripoli)

Year	Quantity produced in litres	SALES OF BEER Quantity in litres	Value in £L	Average number of persons	Amount paid in wages & salaries
1954	1,418,479	139,275	130,298	110	28,092
1955	1,615,192	1,581,892	175,282	110	30,026
1956	1,150,746	1,144,646	151,960	110	33,220
1957	1,253,306	1,281,873	171,495	110	31,333
1958	1,452,038	1,548,571	207,543	109	36,276
1959	1,886,862	1,844,562	247,085	109	40,900
1960	2,839,541	2,694,141	365,288	109	51,435
1961	2,785,389	2,775,622	372,567	109	60,898
1962	2,797,743	2,557,288	345,162	109	64,690
1963	2,563,530	2,427,303	343,098	98	62,686
1964	2,621,607	2,259,736	360,265	101	68,748
1965	3,071,330	2,855,184	505,142	100	70,904
1966	4,044,343	3,749,653	649,841	108	104,693

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 13 ALCOHOLIC BEVERAGES

Production, Sales, Employment and Payrolls in Alcoholic Beverages Industry, 1963 - 1966 (Tripoli)

Year	Quantity produced in Litres	S A L E S		Average number of persons engaged	Amount paid in wages & salaries in £L
		Quantity in Litres	Value in £L		
1963	287,458	276,071	72,801	45	8,595
1964	410,416	412,682	119,518	48	14,570
1965	532,327	529,232	161,229	49	17,870
1966	516,738	521,824	184,045	54	26,507

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 14 SOFT DRINKS

Production, Sales, Employment and Payrolls, 1963-66, Tripoli

Year	Quantity produced in Litres	SALES Quantity in Litres	SALES Value in £L	Average number of persons engaged	Amount paid in wages & salaries in £L
1963	5,259,149	5,197,640	390,925	160	57,142
1964	8,485,297	8,523,328	625,173	228	87,126
1965	11,058,081	11,198,545	833,940	283	117,084
1966	15,267,563	15,206,129	1,132,884	272	171,316

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 15 MANUFACTURE OF PAPER PRODUCTS

Production, Sales, Employment and Payrolls, 1959-1966 (Tripoli)

Year	Quantity produced in Tons	SALES Quantity in Tons	SALES Value in £L	Average no of persons engaged	Amount paid wages and salaries in £L
1959	887	885	38,937	55	12,620
1960	1,359	1,386	59,984	83	15,318
1961	1,338	1,326	58,337	83	19,542
1962	1,647	1,685	81,577	97	25,068
1963	1,683	1,682	81,395	93	21,931
1964	2,662	2,419	119,892	115	29,057
1965	3,862	3,942	198,636	143	38,642
1966	4,249	4,155	231,686	138	49,797

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Trade & Economy,
Tripoli, 1966

Table 16 MANUFACTURE OF LAUNDRY SOAP

Production, Sales, Employment and Payrolls in Soap Industry, 1959-1966 (Tripoli)

Year	Quantity produced in Kg	SALES Quantity in Kg	SALES Value in £L	Average number of persons engaged	Total wages and salaries pd in £L
1959	398,976	408,442	36,333	14	2,243
1960	889,128	916,975	83,284	24	3,625
1961	830,140	825,113	80,914	24	4,744
1962	704,923	723,458	67,749	25	4,742
1963	802,358	700,163	63,303	39	7,017
1964	736,764	799,635	67,455	35	7,339
1965	843,513	752,625	49,232	29	5,957
1966	666,880	639,000	51,542	25	6,651

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 17 MANUFACTURE OF WEARING APPAREL

(A) Sales 1959 1966 (Tripoli)

Year	SALES									
	'Rida'		'Foulard'		'Barracan'		Ferrashia		Others	
	Quantity No	Value in £L	Quantity No	Value in £L	Quantity No	Value in £L	Quantity No	Value in £L	Quantity No	Value in £L
1959	7 260	12 342	20 040	3 607						
1960	9 170	15 589	33 200	5 976	600	2 400	407	1 800		
1961	34 250	76 285	76 500	18 830	3 500	13 092	2 500	7 000		
1962	57 275	128 595	84 590	16 139	5 400	21 116	4 300	12 900		
1963	110 383	187 943	110 383	25 387	6 388	25 313	5 657	17 518		
1964	296 214	484 132	371 833	70 780	34 959	141 395	6 603	19 743	25 516	24 319
1965	325 724	644 172	344 250	69 023	21 182	84 008	10 936	34 229	30 468	28 164
1966	276 256	665 271	238 567	49 673	19 615	77 646	18 243	52 231	29 884	34 411

Source Statistical Abstract
Census & Statistical Dept
Ministry of Economy & Trade
Tripoli 1966

Rida light cotton barracan, gaily decorated with stripes, the finest of which is made with silk or silver embroidery

Table 17 MANUFACTURE OF WEARING APPAREL

(B) Employment, 1959 - 1966 (Tripoli)

Year	Average number of persons engaged	Total wages & salaries paid in £L
1959	17	7,000
1960	25	10,000
1961	62	21,200
1962	108	35,712
1963	143	42,258
1964	315	106,945
1965	323	145,309
1966	287	142,101

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 18 MANUFACTURE OF MATCHES

Production, Sales, Employment and Payrolls, 1963-1966 (Tripoli)

Year	Quantity produced in boxes	SALES		Average number of persons engaged	Amount in wages and salaries in £L
		Quantity in boxes	Value in £L		
1963	14,399,100	8,750,460	45,672	64	21,068
1964	14,256,110	11,814,520	75,371	89	27,845
1965	21,133,900	21,133,900	139,484	90	28,812
1966	24,960,000	22,669,500	134,619	100	27,180

Source Statistical Abstract,
Census & Statistical Dept ,
Ministry of Economy & Trade,
Tripoli, 1966

Table 19(A) TOURIST STATISTICS FROM JANUARY TO DECEMBER 1963, Tripoli

Nationality	Arrivals	January February March	April May June	July August September	October November December	Totals
Arab Countries		2 789	4 355	4 078	3 523	14 745
Turkey		26	65	24	47	162
U K		3 075	2 418	2 605	2 391	10 489
U S A		1 906	2 687	2 607	2 444	9 644
African Countries		50	31	54	38	173
Germany		705	665	717	621	2 708
Italy		2 066	1 753	1 578	1 396	6 793
France		662	409	496	588	2 155
Asian Countries		184	158	253	250	845
Latin American		33	50	41	36	160
Greece		361	352	534	450	1 697
Scandinavian Countries		299	128	145	140	712
Spain and Portugal		250	155	146	279	830
Benelux		416	380	386	200	1,382
Switzerland		82	163	125	148	516
Austria		91	78	73	39	281
Cyprus		135	132	95	159	521
Malta		68	11	36	4	119
Socialist Countries		59	21	76	45	201
Other Countries		283	62	40	111	496
Tourist Cruises		872	2 179	1 749	1 319	6 119
Total of Tourists		14 412	16 252	15 858	14 228	60 750
Nights		93 264	90 841	78 277	83 914	346 296

Source General Administration of Tourism
Ministry of Economy & Trade
Tripoli 1965

Table 19(B) TOURIST STATISTICS FROM JANUARY TO DECEMBER 1964, Tripoli

MONTHS	ARAB COUNTRIES	TURKEY	UNITED KINGDOM	U S A	AFRICAN COUNTRIES	GERMANY	ITALY	FRANCE	ASIAN COUNTRIES	LATIN AMERICA	GREECE	SCANDINAVIAN COUNTRIES	SPAIN & PORTUGAL	BENELUX	MALTA	CYPRUS	SWITZERLAND	AUSTRIA	OTHER COUNTRIES	CRUISES	TOTAL OF TOURISTS	TOTAL OF NIGHTS
Jan	877	2	764	769	7	154	377	166	72	8	114	28	75	90		23	29	7	66	75	3 713	26 939
Feb	868	4	753	710	8	257	494	167	47	3	88	73	60	98	1	60	27	17	189	92	4 006	24 783
Mar	2435	9	1 029	792	6	325	620	245	82		123	11	50	145	2	50	28	16	212	579	6 759	32 958
Apr	1262	2	828	870	8	238	439	266	77	56	154	55	44	119	3	64	50	8	96	137	4 776	27 506
May	1463	4	864	818	13	221	433	239	63	12	140	40	56	106	77	74	31	24	105	328	5 041	2 666
Jun	1109	6	783	867	6	187	486	169	64	10	116	63	42	59	9	73	19	6	80	107	4 261	30 996
Jul	1582	9	728	910	6	167	468	180	83	8	121	38	67	92	6	95	14	11	77	126	4 788	27 802
Aug	1383	13	784	751	12	147	451	216	88	10	107	14	61	90	5	53	24	14	69	952	5 244	21 924
Sep	2028	1	772	890	13	222	496	138	54	14	135	55	64	78	9	57	20	4	106	1 772	6 928	22 098
Oct	1455	6	964	930	17	197	472	177	65	5	205	77	52	101	10	107	47	13	91	516	5 507	21 499
Nov	1391	11	1 046	896	9	191	460	179	56	9	128	67	73	117	21	121	43	11	89	88	5 006	19 676
Dec	1501	4	812	761	12	177	597	245	77	9	150	61	58	108	1	68	33	44	57	235	4 980	27 061
TOTAL	17354	71	10 127	9964	117	2 483	5 763	2387	828	144	1581	572	702	1 203	74	845	365	175	1 237	5 007	60 999	309 308

Source General Administration of Tourism
Ministry of Economy & Trade
Tripoli 1965

Table 19(C)

TOURIST STATISTICS FROM JANUARY TO DECEMBER 1965, T poli

MONTHS	ARAB COUNTRIES	TURKEY	UNITED I INGDOM	UNITED STATES	AFRICAN COUNTRIES	GERMANY	ITALY	FRANCE	ASIAN COUNTRIES	LATIN AMERICA	GREECE	SCANDINAVIAN COUNTRIES	SPAIN AND PORTUGAL	BENELUX	MALTA	CYPRUS	SWITZERLAND	AUSTRIA	OTHER COUNTRIES	CRUISES	TOTAL OF TOURISTS	TOTAL OF NIGHTS
J	1 039	16	853	746	11	168	554	190	46	3	133	46	45	81	2	42	14	23	90	59	4 161	21 629
F b	1 371	13	1 048	739	27	260	667	198	86	7	203	62	89	150	19	66	36	9	269	76	5 395	23 698
Ma	2 834	3	1 040	986	5	216	785	389	110	13	195	177	87	123	12	49	39	37	121	416	637	38 523
Apr	1 718	10	1 143	1 020	16	326	626	331	75	25	167	82	45	98	12	58	47	19	112	1 579	7 509	40 896
M y	1 329	10	963	795	3	213	559	180	76	1	174	68	31	105	4	45	28	16	119	493	5 212	28 548
J e	1 064	2	806	861	4	187	645	214	70	3	117	64	39	158	3	79	26	7	85	625	5 059	30 824
J ly	1 290	2	878	837	4	167	724	187	88	30	139	78	89	163	7	64	26	19	48	82	4 922	31 085
A g	1 561	48	914	796	20	235	746	253	105	18	146	46	58	44	5	106	26	6	87	157	5 377	29 995
Sep	1 691	13	781	721	25	262	803	262	111	14	137	25	45	58	9	98	18	5	86	320	5 484	29 552
Oct	1 460	47	678	676	32	260	749	280	120	10	154	41	50	68	9	77	40	5	59	262	5 077	27 284
No	1 136	3	879	509	83	237	505	235	86	47	149	55	30	103	4	79	16	11	108	328	4 603	28 468
D	1 212	7	755	520	52	206	619	255	101	39	163	69	27	64	10	90	9	11	161	534	4 904	35 698
TOTAL	17705	174	10738	9 206	282	2 737	7982	2974	1074	210	1877	813	635	1215	96	853	325	168	1345	4931	65 340	366200

So Ge r l Dept of Tourism
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Table 19(D) TOURIST STATISTICS FROM JANUARY TO DECEMBER 1966, Tripoli

MONTHS	ARAB COUNTRIES	TURKEY	U K	U S A	AFRICAN COUNTRIES	GERMANY	ITALY	FRANCE	ASIAN COUNTRIES	LATIN AMERICA	GREECE	SCANDINAVIAN COUNTRIES	SPAIN AND PORTUGAL	BENELUX	MALTA	CYPRUS	SWITZERLAND	AUSTRIA	OTHER COUNTRIES	CRUISES	TOTAL OF TOURISTS	TOTAL OF NIGHTS
J	ͻ02		432	364	26	111	545	140	144	23	54	26	22	43	15		10	11	22	61	2 558	16 099
Feb	942	4	ͻ42	328	28	156	740	128	88	6	52	18	22	66	40		12		154	690	4 016	11 095
M r	1 651	9	457	308	7	217	779	215	23	17	32	43	27	43	45		68	11	168	210	4 330	35 450
Ap	1 118	11	472	400	8	168	628	202	53	7	27	52	26	77	24	3	34	4	89	1 605	5 008	27 984
May	996	3	453	360	11	124	663	137	41	23	31	23	18	55	28		18	14	67	1 086	4 151	23 405
J e	993	1	411	384	10	127	843	161	34	12	38	28	10	54	19		29	5	81	136	3 319	24 691
J ly	1 213	11	390	369	3	160	611	165	57	7	35	31	23	40	22		35	13	104	126	3 415	19 958
A g	903	2	315	243	4	67	425	136	61	5	11	11	8	28	21		8	5	23	1 656	3 932	22 381
Sept	888	7	390	241	1	118	386	141	61		23	5	12	46	16	1	18	8	93	262	2 717	19 640
Oct	358	2	148	142	2	48	333	70	26	2	7	11	14	29	5		13	4	18	1 762	2 994	18 375
Nov	1 484		340	282	8	116	40	137	28	7	38	23	38	54	22		31	8	118	220	3 494	22 256
De	1 234	10	422	347	5	147	749	191	88	12	40	86	25	60	25	2	15	14	98	328	3 898	21 537
TOTAL	12 222	67	4 772	3 768	113	1 559	7245	1 823	704	121	388	357	245	595	282	6	291	97	1 035	8 142	43 832	262 871

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APPENDIX II

Table 1 TRIPOLI PORT SHIPPING TRAFFIC AND TONNAGE 1932 - 1965

Year	Commercial ships	Warships	Total arrivals	Total Tonnage N R T in tons
1932	-	-	720	907,000
1933	-	-	681	936,000
1934	-	-	712	1,094,000
1944	-	-	129	-
1945	-	-	132	-
1946	-	-	145	-
1947	331	70	401	445,129
1948	440	69	509	348,555
1949	491	45	536	1,058,531
1950	460	45	505	871,582
1951	563	45	608	882 519
1952	608	58	666	1,033,471
1953	642	53	695	1,070,682
1954	692	86	778	1,286,420
1955	786	65	851	1,268,346
1956	808	83	891	1,326,182
1957	887	153	1,040	1,636,905
1958	1,018	114	1,132	1,777,562
1959	1,193	140	1,333	2,131,659
1960	1,402	133	1,535	2,479,351
1961	1,339	95	1,434	2,308,285
1962	1,402	76	1,478	2,326,144
1963	1,516	75	1,591	2,531,742
1964	1,672	77	1,749	2,670,952
1965	1,942	60	2,002	2,671,971

Source Tripoli Port, Statistics Dept , 1966

Table 2 TRIPOLI PORT - CARGO (IN METRIC TONS)

Year	IMPORTS			EXPORTS		
	Commercial	Military	Petrol, oil and lubrications	Commercial	Military	Total cargo handling
1944	84,850	-	-	61,787	-	-
1945	183,429	-	-	38,940	-	-
1946	101,869	-	-	41,438	-	-
1947	104,146	-	38,648	58,627	-	-
1948	136,008	-	35,978	80,529	-	-
1949	118,682	-	59,155	81,704	-	-
1950	100,627	26,670	52,741	96,328	19,898	296,264
1951	151,852	52,378	53,972	67,329	22,629	349,160
1952	125,560	71,706	94,730	74,689	30,008	400,693
1953	155,703	53,877	99,204	57,697	14,475	380,956
1954	158,901	52,484	154,663	75,286	16,897	458,231
1955	223,531	71,001	163,106	77,867	29,241	565,628
1956	253,531	47,239	165,227	74,898	18,051	558,757
1957	269,517	36,989	201,379	73,284	20,932	602,101
1958	308,591	28,488	173,656	95,823	18,377	624,935
1959	408,888	26,862	176,953	62,972	12,788	688,463
1960	539,501	26,734	185,891	76,472	9,996	838,594
1961	457,171	26,293	153,696	50,312	8,959	696,431
1962	531,072	22,467	187,077	44,423	8,453	793,492
1963	606,262	20,543	195,911	41,554	6,381	870,651
1964	761,244	19,854	222,748	41,244	8,807	1,053,897
1965	952,146	19,013	219,362	30,643	5,979	1,220,143

Source Tripoli Port, Statistics Dept , Tripoli, 1966

APPENDIX III

Table 1 TRIPOLI POPULATION BY SEX AND AGE, 1954

Age (in years)	Both sexes	/	Males	Females	Males per 1,000 females
All ages	129,730	100 0	68,411	61,309	1,115
Under 1 year	4,662	3 6	2,287	2,375	962
1 - 4	13,092	10 9	6,562	6,534	1,004
5 - 9	14,145	10 9	7,105	7,040	1,009
10 - 14	11,354	8 8	5,989	5,365	1,116
15 - 19	12,219	9 4	6,272	5,947	1,054
20 - 24	14,725	11 3	8,252	6,473	1,274
25 - 29	12,720	9 8	7,059	5,661	1,246
30 - 34	9,216	7 1	5,191	4,025	1,289
35 - 39	6,730	5 2	3,753	2,977	1,260
40 - 44	6,563	5 1	3,405	3,158	1,078
45 - 49	5,186	3 9	2,836	2,350	1,206
50 - 54	5,494	4 3	2,846	2,648	1,074
55 - 59	3,344	2 6	1,851	1,493	1,239
60 - 64	3,617	2 8	1,751	1,866	938
65 - 69	2,048	1 6	1,044	1,006	1,037
70yrs & over	4,303	3 3	1,984	2,319	855
Unknown	298	0 2	224	74	-

Source Ministry of National Economy,
Census & Statistical Dept ,
General Population Census, 1954,
Tripoli, 1955, p 20

Table 2 TRIPOLI POPULATION BY SEX AND AGE, 1964

Age (in years)	Both sexes	/	Males	Females	Males per 1,000 females
All ages	212,577	100 0	111,029	101,548	1,093
Under 1 year	8,823	4 1	4,473	4,350	1,028
1 - 4	31,954	15 0	16,143	15,811	1,020
5 - 9	31,232	14 6	15,665	15,567	1,006
10 - 14	20,215	9 5	10,529	9,686	1,087
15 - 19	15,883	7 4	7,904	7,979	990
20 - 24	17,776	8 3	8,871	8,905	996
25 - 29	19,258	9 0	10,026	9,232	1,086
30 - 34	15,537	7 3	8,644	6,893	1,254
35 - 39	12,846	6 0	7,344	5,502	1,334
40 - 44	9,681	4 5	5,547	4,134	1,341
45 - 54	13,118	6 2	7,204	5,914	1,218
55 - 64	8,600	4 1	4,546	4,054	1,121
65 - 74	5,020	2 4	2,411	2,609	924
76yrs & over	3,079	1 5	1,411	1,588	888
Not identified	484	0 1	257	277	-

Source Ministry of Economy & Trade,
Census & Statistical Dept ,
General Population Census, 1964,
Tripoli, 1967, p 2

APPENDIX IV

Table 1 NUMBER OF TREES AND PRODUCTION IN TRIPOLI, 1960

Kind of tree	Productive	Non-productive	Total	Production in qtls
Olives for table use	500	-	500	34
Olives for oil	23,100	4,500	27,600	6,749
Olives (total)	23,500	4,500	28,000	6,783
Dates	11,000	800	11,800	1,709
Almonds	4,800	300	5,100	195
Vines for table use	800	400	1,200	100
Vines for wine	316,200	50,000	366,200	704
Vines (total)	317,000	50,400	367,400	804
Oranges	32,600	3,800	36,400	2,848
Tangerines	4,000	200	4,200	319
Lemons	900	900	1,800	199
Grapefruit	400	-	400	11
Citrus (Total)	37,900	500	38,400	3,377
Apples	1,400	200	1,600	105
Pears	900	200	1,100	84
Peaches	200	100	300	17
Plums	1,800	100	1,900	186
Bananas	6,200	100	6,300	239
Figs	1,100	100	1,200	204
Pomegranates	2,800	200	3,000	399
Apricots	500	-	500	118
Other fruit trees	400	100	500	51
Total	788,000	117,400	905,400	25,236

Source 1960 Census of Agriculture, Tripoli, 1962, p 248

APPENDIX V

Table 1 SECOND MUNICIPAL FIVE YEAR PROGRAMME (1968-72)

	Kind of planning programme	Value in £L
1	Improvement of the seaside coast between the Ministry of Industry and the eastern boundary	1,200,000
2	Improvement of the seaside coast between the Tripoli Electricity Corporation and the Municipal beach to the north-west of the CBD	1,240,000
3	Extension of Haiti Street (CBD)	600,000
4	Improvement and enlargement of Gargaresh Sewerage Pumping Station	180,000
5	Improvement of Bab Ben Gashir intersection	480,000
6	Improvement and maintenance of roads and streets within the Shara el Shatt and Zaweit el Dahmani quarters	1,455,000
7	Improvement of Dahra quarter	450,000
8	Improvement and maintenance of Ras Hassan in the Shara Ben Ashur quarter	61,000
9	Improvement of Shara Srim quarter and Sidi Khalifa area	1,187,000
10	Improvement of Gurgi area and Gargaresh quarter	3,333,000
11	Improvement of Shara Ben Ashur quarter	1,030,000
12	Construction of new roads and streets within the Shanty Town, Ben Nabi street and Shara el Kebir quarter	750,000
13	Improvement of Bab el Azizia intersection	450,000
14	Improvement of intersection of Suani Road with Ring Road	1,500,000
15	Construction of a new bridge with subways at Shara Mohammed Ali Essanussi with the Mellaha highway	250,000

Continued

	Kind of programme planning	Value in £L
16	A new road in Jabbanat el Hofra in the Shara Ben Ashur	450,000
17	Site land to be allocated for new cemetery outside of city boundary	800,000
18	Creation of Zoo to the south of Tripoli near the Shanty Town	450,000
19	Subway within the central business district	250,000
20	Redevelopment of Grand Hotel	1,000,000
21	Redevelopment of Del Mahari Hotel	1,000,000
22	New park at Gargaresh Gate	220,000
23	Completion of the Local Handicraft Market in the Old Town	180,000
24	General maintenance of the Old Town	250,000
25	Other civic programmes	1,595,000
	Total	£L20,362,000

Source Municipality of Tripoli, 1968.

APPENDIX VI

University of Libya,
Faculty of Arts & Education,
Department of Geography

Questionnaire No.1

1 Name
2 Nationality
3 Type of commercial activity
4 Place of work
5 Is the establishment privately-owned or owned by a company?
6 Does the owner employ workers or employees (staff)?
7 Do you specialise in commercial work?
8 How many hours a day does the owner spend in the establishment?
9 Where do you go for lunch? Home, or to a nearby restaurant?
10 Do you close the establishment for lunch?
11 How do you travel to work?
12 Do you deal directly with foreign companies or do you deal with local wholesalers?
13 At what season is business most active?
14 Which day of the week is busiest?
15 Does business activity increase on religious occasions?
16. At what hours of the day is business most active?
17 Does the hot season affect your work? Do you use air conditioning?
18 What type of customers come to your establishment? Arabs or foreigners?
19 Are your prices fixed or subject to bargaining?
20 Do you use a telephone in your establishment?

Questionnaire No.2

Traditional and Modern Industries, Tripoli (1966-1968)

1. Name of the owner
2. Nationality
3. Is the firm or the factory privately owned?
4. Kind of the industrial activity
5. Where is the firm or the factory situated?
6. Total area of the firm or the factory State the built-up area and open space
7. Capital
8. Number of employees (skilled and unskilled)
9. Total annual production
10. Where do you sell your products?

Questionnaire No.3

Traditional and Modern Houses of Tripoli (1966-1968)

1. Name
2. Name of locality
3. Is the house you live in rented (state the monthly rent) or privately-owned?
4. Are you living in a separate household with your family or with others? State the number
5. Date the house was built
6. Number of rooms
7. Number of storeys
8. What type of house is it? Arab or another type?
9. What special amenities are there in the house? e g -
   a) electricity
   b) water
   c) good ventilation

10 Distance between your house and place of work
11 What means of transport do you use in travelling to work?
12 Why do you prefer to live in this house?
13 Have you lived in it for many years? State the number
14 Do you prefer the Arab or European type of house?
15 Has the house good ventilation and fresh air?

Questionnaire No.4
In- and out-Migration, Tripoli (1966-1968)

1 Name of migrant
2 Date of arrival in Tripoli Age
3 Period spent in Tripoli
4 Original place of residence
5 State the locality where the migrant lives now
6 Is the migrant alone or with his family?
7 Occupation - a) before migration, b) after migration
8 Give the reasons for migration
9 Marital status - married, divorced, single
10 Number of people in the family, if married
11 Are there married sons? If so, are they living with the migrant?
12 Daily income of migrant
13 Basic occupation at the present time
14 Current place of residence
15 Type of house
16 Is the house rented (state the monthly rent) or privately-owned?
17 Is the migrant in an independent household or is it shared?
18 Does the house have special amenities such as electricity, water, good ventilation?
19 Educational level

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