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HUMAN SETTLEMENTS DIVISION

THE HUMAN SETTLEMENTS SITUATION IN THE SULTANATE OF OMAN

Country Profile

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FOREWORD

Within the framework of the work programme of its Human Settlements Division, the United Nations Economic and Social Commission for Western Asia (ESCWA) has embarked on the preparation of country profiles on human settlements and the building materials and construction industries in respect of all its member countries.

The profiles are not meant to be an end in themselves. Rather, they represent a foundation on which other studies can be based in an endeavour to achieve the twin goals of integrating the physical dimension of planning with the overall national socio-economic and environmental development planning, and developing local building materials and construction industries.

The profile is structured to present general information on the country, with emphasis on physical, socio-economic, demographic and other aspects that affect or are affected by human settlements development; it includes data on the building materials and construction industries. Where applicable, the profile outlines declared government policies, objectives and strategies for the development of human settlements and of the building materials and construction industries. It includes the present situation as regards the institutions that have been set up and the manpower trained for the implementation of the declared policies and, where appropriate, it points out gaps problems and constraints, as well as existing or potential opportunities that must be taken into account in formulating future policies and plans for the development of human settlements and the building materials and construction industries.

Follow-up action will include an in-depth analysis of the information contained in the country profile, the formulation of proposals and recommendations for the solution of existing problems with a view to achieving the twin goals mentioned above and, once all the countries of the ESCWA region have been covered, a set of indicators will be complied and periodically updated which will provide the planners and policy-makers with a useful tool for evaluating and monitoring the progress made in the development of human settlements and the building materials and construction industries.

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PART ONE

I. GENERAL INFORMATION

A. Location and geographic characteristics*

The Sultanate of Oman, with an area of 300,000 square kms, is one of the largest countries in the ESCWA region. Oman is located at the extreme east and south-east of the Arabian peninsula, bordered by the United Arab Emirates, Saudi Arabia and the People's Democratic Republic of Yemen to the west. A detached portion of Oman, separated from the rest of the country by UAE territory, lies at the tip of the Musandam peninsula, on the southern shore of the Strait of Hormuz. Oman has a coastline of more than 1,600 kms on the Indian Ocean and is located between latitudes 16^{o} 40'N and 26^{o} 20'N and longtitudes 51^{o} 50'E and 59^{o} 40'E.

The country can be divided into three distinct geographical regions: the coastal plain which contains the most fertile area; a range of mountains which is barren except for parts of the Jebel Akhadar; and the plateau where there is little cultivation except around the oases.

The other classifications of the land area are presented in table 1.

Table 1. Classification of the land area of Oman

Land area	Sq. km.	Sq. miles
Total	300,000	120,000
Regions		
Dhofar	100,000	40,000
Musandam	2,000	800
Other	198,000	79,200
Type of terrain		
Mountains (450 m +)	45,000	18,000
Coastal plains, inhabited	9,000	3,600
Wadi and desert areas (450 m -)	246,000	98,400

Source: Statistical Year Book of Oman 1984, (Development Council, Technical Secretariat, Directorate General of National Statistics, Muscat, 1985) (henceforth referred to as "Statistical Year Book of Oman").

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* Oman Economic Report 1986, Lloyds Bank London, 1986), henceforth known as "Oman Economic Report 1986", and Oman Introductory Survey", The Europa Year Book 1984 (Europa Publications Limited, London, 1984).

Though the detailed geological structure of Oman is complex and a subject of controversy, the general outlook is simple. The two basic areas, the Oman mountains and southern Oman, are geographically and geologically separate and different.

In the simplified stratigraphic section, the mountainous area sequence can be divided into five major units. In order of oldest to youngest formations these are:1/

(a) Pre-Permian age; with phyllites, other metamorphic rock with doleritic intrusions.

(b) Hajar supergroup (Permian to mid-Cretaceous age); with local conglomerate, massive limestones, local volcanic near base, shales and sandstones.

(c) Hawasinah Series (Jurassic to mid-Cretaceous age); with redeposited limestones, shales, cherts, cherty limestones, siltstones, cherts with mafic to intermediate volcanics.

(d) Semail Nappe (mid to upper Cretaceous age); with an ophiolite sequence of ultrabasic lithologies. The Semail Nappe forms most of the Oman Mountains.

(e) Tertiary age; with limestones.

The southern (Dhofar) region is geologically quite different from the mountainous area. None of the units found in the north is present in Dhofar. Relatively undeformed Tertiary sediments and carbonate rocks predominate and the geological history is less structurally complex.

B. Climate, flora and fauna

The climate is exceptionally hot and humid in the summer months. At the coastal area temperature rises up to 47°C with a humidity of 85 to 90 per cent during summer, and mild temperatures of 16°C-32°C in winter. The coastal area has monsoon rains, mainly in summer months. The interior region, except the high altitudes (1,000-3,000 metres mainly in the north-east) is hot and dry. The rainfall in the interior region is very low and irregular. The annual average rainfall is about 200 mm near the foothills of the western Hajar range, decreasing rapidly southward into the basins proper. Rainfall in the highest parts of the range may exceed 400 mm/year. The mean annual rainfall on the plain is from 80 to 100 mm.

During the winter months, north-easterly winds with associated cold fronts cross the northern part of the country and cause rains in the mountains. The monsoon winds cause occasional summer storms around the Muscat area.

1/ Sultanate of Oman, Ministry of Commerce and Industry, Building Industry Raw Materials Study, (Robertson Research International Limited, 1981).

Oman is fortunate to have retained quite a number of trees in spite of the aridity of the environment. The existence of these trees is due to the age-old wisdom of the people of Oman who did not cut trees for firewood. The trees generally grow on the sheltered and damper slopes, whereas the mountainous areas exposed to the drying effects of the wind and sun are usually bare.

It has been reported that the lack of trees in many parts of the mountainous slopes is due to the lack of rain and water and not to lack of fertile soil.1/

The thar, the oryx, the ibex and the green turtle make up the existing wildlife population in Oman. During times of drought, the thar and domestic goats in particular face threats to their survival. Most of the larger animals of the mountainous area (such as the libex, thar, wolf, leopard, wild cat and gazelle) have been hunted almost to extinction.

C. Administrative division

The Sultanate of Oman is divided into 41 governorates (wilayats) in addition to the capital area, each administered by a governor (Wali). The capital area, (Muscat) is administered by the governor of the capital with the assistance of the governor at Sib and the deputy governor at Bawshar. There are 1,898 towns and villages in Oman. The distribution of towns and villages according to governorates is presented in table 2.

Table 2. Administrative division of Oman: the governorates, towns and villages

Name of the governorate	Name of the region	Number of towns and villages
Capital area	Capital area	90
1. Khasab	Musandam	25
2. Daba	Musandam	114
3. Bukha	Musandam	30
4. Madha	Musandam	3
5. Quriyat	Quriyat	34
6. Barka	Batinah region and western Hajar	52
7. Nakhal and Wadi Ma'awil	Batinah region and western Hajar	27
8. Awabi	Batinah region and western Hajar	16
9. Rustaq	Batinah region and western Hajar	138

1/ Oman, State of the Environment Report 1980, United Nations Environment Programme, Regional Office for Western Asia, Beirut), p. 5.

Table 2. (Cont'd)

Name of the governorate	Name of the region	Number of towns and villages
10. Masanaa	Batinah region and western Hajar	124
11. Suwaiq	Batinah region and western Hajar	77
12. Khabura	Batinah region and western Hajar	74
13. Saham	Batinah region and western Hajar	39
14. Sohar	Batinah region and western Hajar	91
15. Liwa	Batinah region and western Hajar	28
16. Shinas	Batinah region and western Hajar	28
17. Ibri	Al-Dhahira	116
18. Yanqal	Al-Dhahira	37
19. Dank	Al-Dhahira	40
20. Buraimi	Al-Dhahira	21
21. Muhdah	Al-Dhahira	28
22. Bidbih	Interior area	4
23. Sumail	Interior area	56
24. Jzki	Interior area	30
25. Adam	Interior area	26
26. Manah	Interior area	7
27. Nizwah	Interior area	43
28. Hamra	Interior area	23
29. Bahla	Interior area	30
30. Mudaibi	Eastern region	90
31. Ibra	Eastern region	15
32. Qabil	Eastern region	16
33. Bidiya	Eastern region	12
34. Dima and Taieen	Eastern region	47
35. Wadi Bani Khalid	Eastern region	24
36. Kamil and Wafi	Eastern region	13
37. Sur	Eastern region	57
38. Ja'alan Bani Hasan	Eastern region	37
39. Ja'alan Bani By Ali	Eastern region	43
40. Masirah	Eastern region	32
41. Dhofar	Southern region	64
Total		1,898

Source: Statistical Year Book of Oman, p. 6.

D. Population and social characteristics

1. Population situation, characteristics by age and sex

No census has ever been conducted in Oman. The present population is assumed to be approximately 1.2 to 2.0 million.1/ In 1975, relying on the limited available data and various indirect demographic methods, the most reasonable estimate of the population was assumed to be 766,000 (United Nations, Department of International Economic and Social Affairs 1979 and World Bank estimates). The number of foreigners in 1975 was estimated to be around 100,000 of the population (about 13 per cent). In 1984 this number increased to about 300,000 (20 per cent). About 75 per cent of the population was estimated to be rural, 15 per cent were believed to be living in urban areas and 10 per cent were thought to be nomadic in 1975.2/ The ratio of urban population is estimated as 21.5 per cent for the year 1984.3/

Oman's population is concentrated in the coastal regions. In 1975 about half of the population resided along the coastline. The population in the capital area of Muscat-Mutrah represented about 8 per cent of the total population in 1975. Density in the urban areas has been relatively low in comparison with other Arab countries. The overall density in Oman was estimated to be 2.5 persons per km^2 in 1975. The density in 1984, with the population estimated at 2.0 million, was 6.6 persons per km^2.

The 1984 ESCWA estimation of age-sex structure for the Omani population is presented in table 3., and illustrated in figure 1. The overall sex ratio was estimated to be 102.0 in 1975 and 112.1 in 1984.4/ The Omani population is comprised of rather young age groups. Approximately 53 per cent of the population is under 20 years of age. The average life expectancy has been put at 52 years.5/ (The ESCWA estimate for life expectancy of Omanis is 49.5 years for males and 52.0 years for females).

1/ The Statistical Year Book of Oman states the population was 2 million in 1984 and the Oman Economic Report 1986, states the population was 1.2 million in 1984. The ESCWA estimates for 1984 was 1.181,012 persons.

2/ The Population Situation in the ECWA Region, Oman (henceforth known as "The Population Situation"). (United Nations Economic for Western Asia, Beirut, 1981).

3/ Demographic and Related Socio-Economic Data Sheets for Countries of the Economic and Social Commission for Western Asia (ESCWA), No. 4 (ESCWA, Baghdad, 1985) (henceforth known as "Data Sheets").

4/ The Population Situation, and ESCWA estimates.

5/ Oman Economic Report 1986.

According to United Nations estimates, the rate of population growth in Oman as of 1975 was approximately 3 per cent annum. Given the demographic and socio-economic characteristics of the population and the increasing economic opportunities in Oman, it is probable that the rate of growth will continue at approximately this rate and may even increase in the near future. Some sources already put the current growth rate of the population at 4.2 per cent annum with about 16.8 per cent in the densely inhabited urban areas.[1/] Assuming a growth rate of 3 per cent per annum and a total population of 776,000 in 1975, the population in the year 2000 will be around 1.6 million, of whom about 1.4 million will be Omani nationals. Based on the official government estimate, however, the 1975 population of 1.5 million will be around 3.2 million in the year 2000.[2/]

Table 3. Oman: total population by age and sex, 1984

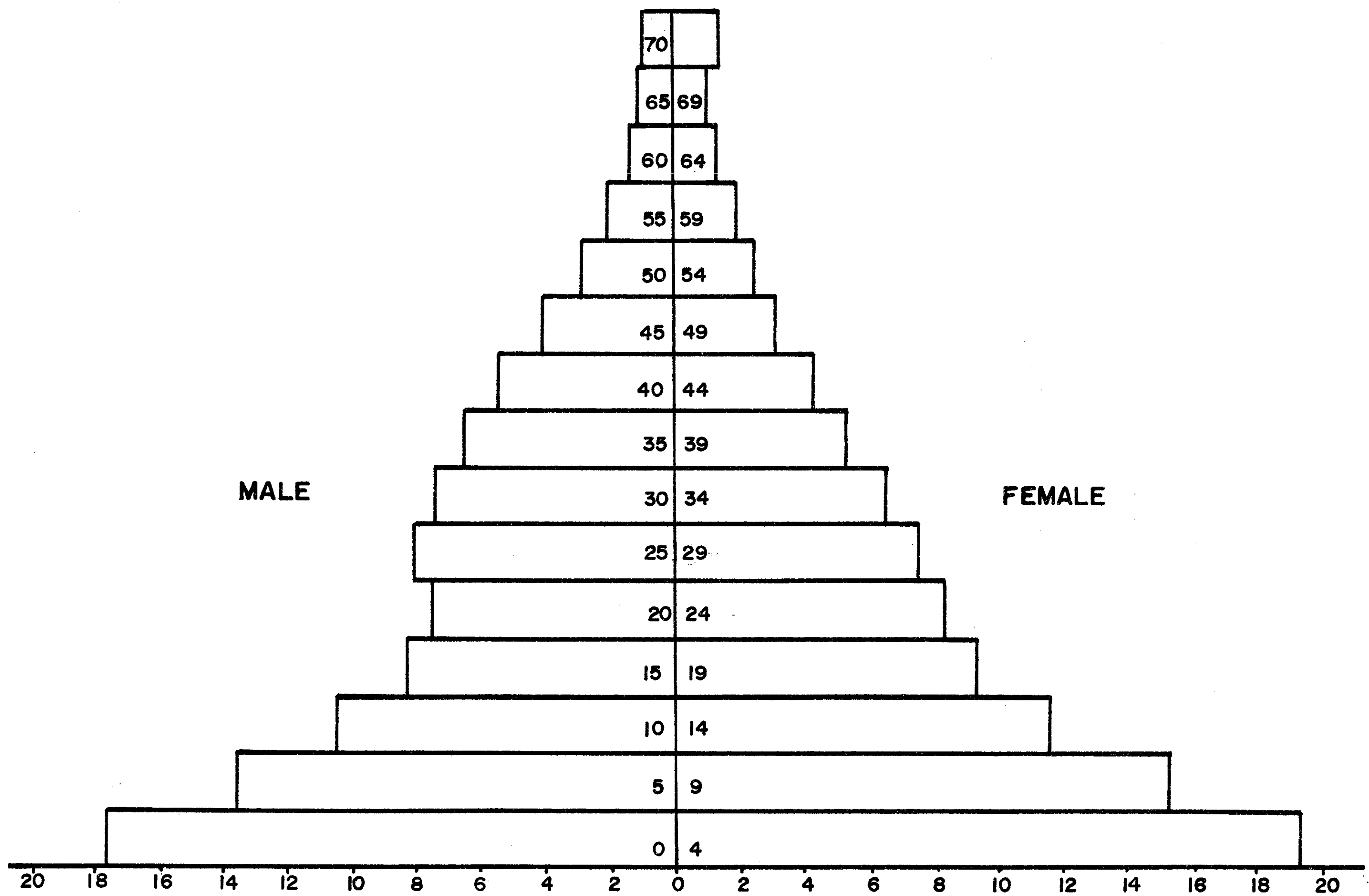
Age group	Total	Male	Female
0-4	218,322	110,599	107,723
5-9	171,187	86,555	84,632
10-14	131,757	67,321	64,436
15-19	105,790	53,857	51,933
20-24	95,211	49,048	46,163
25-29	93.287	50,971	42,316
30-34	84,632	48,086	36,546
35-39	71,168	41,354	29,814
40-44	57,703	33,660	24,043
45-49	44,240	25,967	18,273
50-54	34,623	19,235	15,388
55-59	25,005	13,464	11,541
60-64	18,273	9,617	8,656
65-69	13,997	7,694	6,303
70-74	8,656	3,847	4,809
75-79	4,808	1,923	2,885
80+	2,353	962	1,391
Total	1,181,012	624,160	556,852

Source: Data Sheets, 1985.

1/ Oman Economic Report 1986.

2/ The Population Situation.

Figure 1. AGE-SEX PYRAMID OF THE POPULATION OF OMAN IN 1984



Source: Estimated by ESCWA.

2. Household size and mobility of the population

Information from a 1977-1979 survey in 11 towns yields a median household size in Oman of 5.8 persons. In comparison with other countries in the region, this size does not seem very high.1/ Data on household size and distribution for the countries of Oman, Kuwait and the Syrian Arab Republic are presented in table 4.

Table 4: Distribution of households by size of household in Oman, Kuwait and the Syrian Arab Republic

Size of household	Distribution of households		
	Oman (nationals) 1977-1979	Kuwait (nationals) 1975	Syrian Arab Republic 1970
1	6.3	1.4	5.7
2	10.2	4.1	9.1
3	11.3	6.0	9.5
4	11.8	7.8	10.8
5	13.2	8.8	11.9
6	12.1	9.5	12.2
7	10.0	9.9	11.6
8	7.7	10.3	9.8
9	5.6	9.8	7.5
10	4.1	8.5	5.1
11	2.2	6.5	2.9
12	1.8	4.9	1.6
13	1.0	3.4	0.9
14	0.8	2.5	0.5
15 and over	1.9	6.6	0.9
Total	100.0	100.0	100.0
Number	18,923	60,712	1,061,839
Median	5.8	8.2	5.9

Source: The Population Situation, p. 7-9.

1/ See The Population Situation.

Data on Omani population 10 years and over by age, sex and martial status 1977-1979 are presented in annex I.

Oman cannot yet be considered an urban country. However, it is estimated that a significant number of people are moving from the rural areas to take advantage of ever-increasing opportunities in the cities. The Government's policy for urban mobility is to accomplish a well-balanced distribution of population and avoid the creation of large urban centres. By providing better facilities, including homes, schools and clinics in villages and other forms of development assistance to rural and non-urban communities, the Government has already succeeded in reducing the drift from the country to the cities by about 50 per cent.1/

International migration has been an important factor in the demography of Oman. Before the year 1970 Omanis constituted an important source of labour for countries in the Gulf. However, after the 1970s the large out-migration of Omanis ended and the majority of Omanis living abroad have returned. Now Oman has expatriate labour not comparable in number with the Omani workers outside of the country.

3. Educational characteristics of the population

Education has been universally available in Oman only since 1970, when there were 3 school with 909 students. Since that time facilities have increased enormously. The Government is planning to provide six years of primary schooling, three years of preparatory schooling and three years of secondary schooling throughout the country. At present, most attention is focused on the primary and junior high school level.

In the academic year of 1984/1985, there were 604 schools (including all kinds of educational facilities) with 6,461 classes and a total of 200,645 students. The number of teachers for the same year was 8,950. Out of a total number of 604 schools, 31 were private with 3,399 students. For the same year, nearly 60 per cent of all the students were males. With regard to all the students 78.2 per cent in primary school, 14.2 per cent were at preparatory level (junior high) and, 4.6 per cent were in secondary school (senior high). Detailed data on the number of educational facilities, students, staff and the distribution of government schools with regards to educational regions are presented in annexes II, III, IV, and V.

Oman's first university is expected to begin education activities in the 1986/1987 academic year. In 1985 there were 2,316 Omani university students studying abroad. Eighty-three per cent of the university students were males. There were 267 government Literacy Centres with 11,360 students in 1984/1985, where older age groups past school age were being educated in literacy programmes.

1/ Oman '85 (Ministry of Information, 1985).

The total teaching staff in the government schools amounted 9,236 in the 1984/1985 academic year. The Omani teachers numbered 1,675, constituting 18.1 per cent of the total. The others were Egyptians (56.6 per cent), Jordanians (10.5 per cent) and Sudanese (6.3 per cent). The Government of Oman is trying to increase the number of Omani teaching staff in the near future.

4. Employment

Oman's need for trained manpower continues to grow as modernization forges ahead and more public utilities and new industrial projects come onstream. High priority is therefore being given by the Government to speedy development of the country's human resources through education and on-the-job training of men and women in a wide range of skills. Conditions in Oman at the same time offer favourable job opportunities to foreigners with technical qualifications not held by Oman's.1/

Total employment was estimated at about 450,000 in 1983, including those workers with jobs related to defence and security forces. Of these less than 43 per cent were Omanis, a substantially lower share than in 1978, when Omanis accounted for close to 60 per cent of total employment. Although growth of the national labour force has been extremely high, at over 6 per cent per year, the number of expatriates grew at an even higher rate of about 20 per cent per year during this period.2/

Figures for Omanis working in the private sector are not available and thus it is only possible to estimate the economically active population and its distribution to the sectors.

According to United Nations estimates for 1984 (excluding defence and security forces) the economically active population was around 326,000 with 90.2 per cent of them males. About 37 per cent of the total work-force was in agriculture and about 27 per cent was in industry, including mining, electricity, gas and water and construction; about 36 per cent was in services.

With regard to the distribution of the male work-force. Agriculture was in first place followed by the community and personal services and construction activities were in third place. For female work-force distribution, the community and personal services were in first place, followed by manufacturing and agriculture. The estimated economically active population by sector and sex for the year 1984 and its percentage distribution is presented in table 5 below.

1/ Oman '85 (Ministry of Information, 1985).

2/ World Bank, Oman, Recent Economic Development and Prospects, 1985, p.8.

Table 5. Oman: economically active population by sector and sex, 1984

Agriculture	Total	%	Male	%	Female	%
Agriculture	120,077	36.8	114,908	39.0	5,169	16.1
Industry						
Mining and quarrying	8,148	2.5	7,955	2.7	193	0.6
Manufacturing	31,359	9.6	21,214	7.2	10,145	31.6
Electricity, gas and water	6,841	2.1	6,777	2.3	64	0.2
Construction	42,652	13.0	42,427	14.4	225	0.7
Services						
Wholesale and retail trade	25,491	7.8	23,276	7.9	2,215	6.9
Transport, storage and communication	27,452	8.4	25,044	8.5	2,408	7.5
Finance and business	3,562	1.1	3,241	1.1	321	1.0
Community and personal services	61,158	18.7	49,793	16.9	11,365	35.4
Total	326,740	100.0	294,635	100.0	32,105	100.0

Source: ESCWA estimates.

The estimated economically active population in the age and sex categories for 1984 and their ratios to total population in the same groups are presented in table 6.

It is understood that almost all the male population between the ages of 25 to 50 is economically active. The economically active female population is comparatively very low. The highest activity ratio is observed in the 30 to 34 age group with 17 per cent. In the total population the highest activity ratio is observed in the 35 to 39 age group, with 63.7 per cent.

Table 6. Oman: economically active population by age and sex, 1984 and percentages to total population in age groups

Age group	Total	%	Male	%	Female	%
15-19	22,835	21.6	19,927	37.0	2,908	5.6
20-24	46,333	48.6	42,132	85.9	4,201	9.1
25-29	54,286	58.2	48,066	94.3	6,220	14.7
30-34	53,854	63.6	47,605	98.9	6,249	17.1
35-39	45,348	63.7	40,816	98.7	4,532	15.2
40-44	35,881	62.2	32,852	97.6	3,029	12.6
45-49	26,878	60.8	24,850	95.6	2,028	11.1
50-54	19,058	55.0	17,581	81.4	1,477	9.6
55-59	11,799	47.2	11,014	81.8	7,785	6.8
60-64	6,877	37.6	6,453	67.1	424	4.9
65 +	3,591	12.0	3,339	23.1	252	1.6
Total	326,740		294,635		32,105	

Source: Calculations based on table 3.

The majority of the working Omani nationals are self employed, mostly in agriculture and fisheries, and a few others in their own business ventures such as trade and passenger-carrying vehicles. These are occupations which require little know-how since the majority of the population are not highly educated. The rest are employed in the services sector, especially in government.

The total number of government employees (excluding employees in defence, police and the General Telecommunications Organization) increased by over 7 per cent in 1985 to reach 66,648 employees. Almost 60 per cent of the government employees are nationals (39,192 persons). By the end of 1985 the number of expatriates in the private sector reached 284,333. The growth rate of the expatriate employment in the private sector is slowing down. In 1983, it rose by 26 per cent, in 1984 by 14 per cent and in 1985 by only 6 per cent.1/

The distribution of expatriate workers for the years 1980-1984 is presented in annex VI. The distribution of expatriate workers to the year of 1984 according to nationalities is presented in annex VII.

The expatriate work-force has replaced not only Omani workers who have found better paying jobs but also some family workers women and children in traditional work; this has enabled children to attend schools. This trend will have a favourable longer-term effect on social and economic development.

E. Structure of economic activity

The year 1985 marks the end of Oman's first decade of planned economic development and despite falling oil prices, the economic targets for the end of the second Five Year Plan have been accomplished. In contrast to many other countries, Oman was able to hold inflation in check and even prices of some commodities have fallen in the past few years. Oman met its objectives by increasing oil production to 416,000 barrels a day in 1984, and 498,000 barrels a day in 1985 to make up for the shortfall in government revenues. The policy to keep the oil production at a certain level was, however, compensated for by the new oil discoveries. Oman's basic strategy for further growth is aimed at making the country self-reliant as soon as possible. Dependence on only one source - oil - has to be reduced with diversification of the economy.

Important progress has been achieved in this respect since 1975. At the end of 1975, for example, there were only 10 industrial units; the number rose to 2,300 units by the end of 1983. The investment capital in this sector increased about 500 times during the same period. In 1984, the first oil refinery at Mina Al-Fahal reached its full capacity, making Oman self-sufficient in this field, and the government-owned cement plant started production, making possible the production by domestic means of more than 60 per cent of the cement needed in Oman. In 1984 again, copper exports of Oman showed significant progress.

The Second Five Year Plan encouraged the private sector to play a larger role in the continued growth of the economy. The Government tried to stimulate the private sector by grants and interest-free loans. Entrepreneurs, local or foreign, have incentives such as tax exemptions, duty-free import of some equipment and free transfer of profits.

The estimated gross domestic product (GDP) in 1985 indicated an overall growth rate of the economy as 13.8 per cent which was higher than the previous year. The role of the oil sector in GDP is decreasing as a consequence of the successful implementation of the policies for diversification of economic activities. The outputs in current prices and the shares of economic activities in GDP for 1981-1985 are presented in tables 7 and 8.

1/ Central Bank of Oman, Annual Report 1985, p. 15.

Table 7. Industrial origin of gross domestic product at current prices
(In RO millions)

Industry	1981	1982	1983	1984	1985
Agriculture	40.5	45.7	53.4	57.1	67.5
Fishing	21.6	20.4	27.1	31.9	31.0
Crude oil	1,456.1	1,402.0	1,353.3	1,408.7	1,609.3
Natural gas	17.7	18.9	25.8	33.6	36.0
Mining and quarrying	2.6	3.8	5.5	7.2	8.8
Manufacturing	27.0	39.6	67.1	91.2	111.1
Electricity	13.9	15.9	16.5	25.2	27.1
Water	4.8	5.4	7.5	7.5	9.7
Construction	144.9	169.8	187.4	225.3	242.3
Wholesale & retail trade & Hotels	251.3	299.5	315.7	369.0	445.8
Transport	42.0	49.6	53.3	60.2	67.4
Communication	11.8	15.3	19.6	24.3	27.7
Banking	44.7	51.8	56.4	66.3	69.5
Insurance	4.3	10.0	7.2	12.2	14.2
Ownership of dwellings	130.8	137.3	152.4	154.1	159.5
Business services	28.6	32.1	34.1	42.9	46.5
Personal services	16.9	20.7	25.4	31.6	35.3
Public administration & defence	206.1	234.5	280.9	332.9	373.0
Other government services	54.4	70.5	79.1	91.0	104.9
Minus imputed bank service charges	-39.0	-43.9	-49.6	-59.2	-63.4
Plus import duties	11.3	14.7	21.7	31.7	41.1
GDP at purchaser's values	2,490.5	2,613.6	2,739.9	3,044.7	3,464.3
Minus net factor payments abroad*	-244.0	-248.0	-312.0	-372.0	-410.0
GNP at market prices	2,246.5	2,365.6	2,427.9	2,672.7	3,054.3
Non-oil GDP at Purchasers values	1,034.4	1,211.6	1,386.6	1,636.0	1,855.0

Source: Development Council.

* Central Bank's estimates, 1985 Annual Report of Oman Central Bank.

Table 8. Industry share of GDP at current prices

(Per cent)

Industry	1981	1982	1983	1984	1985
Agriculture	1.6	1.7	1.9	1.9	1.9
Fishing	0.9	0.8	1.0	1.0	0.9
Crude oil	58.8	53.7	49.4	46.3	46.5
Natural gas	0.7	0.7	1.0	1.1	1.0
Mining and quarrying	0.1	0.1	0.2	0.2	0.3
Manufacturing	0.9	1.5	2.5	3.0	3.2
Electricity	0.5	0.6	0.6	0.8	0.8
Water	0.2	0.2	0.3	0.3	0.3
Construction	5.8	6.5	6.8	7.4	7.0
Wholesale & retail trade & Hotels	10.0	11.5	11.5	12.1	12.9
Transport	1.7	1.9	1.9	2.0	1.9
Communication	0.5	0.6	0.7	0.8	0.8
Banking	1.8	2.0	2.1	2.2	2.0
Insurance	0.2	0.4	0.3	0.4	0.4
Ownership of dwellings	5.2	5.3	5.6	5.1	4.6
Business services	1.1	1.2	1.2	1.4	1.3
Personal services	0.7	0.8	0.9	1.0	1.0
Public administration & defence	8.2	9.0	10.2	10.9	10.8
Other government services	2.2	2.7	2.9	3.0	3.0
Minus imputed bank service charge	-1.6	-1.7	-1.8	-1.9	-1.8
Plus import duties	0.5	0.6	0.8	1.0	1.2
GDP at purchaser's values	100.0	100.0	100.0	100.0	100.0

Source: Development Council, 1985 Annual Report of Oman Central Bank.

Information on the distribution of gross fixed capital formation by type of economic activity, relative shares and the quantitative development of some sectors are presented in annexes VII, IX and X.

Oman, despite the significant growth accomplished, has in recent years faced some problems in the balance of payments. Problems have arisen due to the fact that consumption, investment and transfers grew more rapidly than GDP. The problems have been of a manageable size, however, being important indicators for the needs of long-term planning.

1. Oil and gas

Oil has dominated the economy since commercial production began in 1967. It amounts to just under half of GDP, around 86 per cent of government revenues and 99 per cent of the country's exports. In 1985 the production of crude oil was around 500,000 barrels a day.

In early 1986 oil reserves were estimated at 4 billion barrels, which is more than double the 1976 estimates. The present reserves will last about 22 years at current rates of production.

The basic oil-producing areas in Oman are the central desert about 300 km south-west of Muscat and the southern oil fields in northern Dhofar. Despite new discoveries, oil resources are relatively small in Oman, particularly when compared with other Arab producers. The Government is trying to promote use of gas for domestic purposes as an energy substitute for oil. Proven reserves of natural gas in 1985 stood at 7.7 trillion cubic feet, which is equivalent to about 50 years of domestic consumption at the current rate of use. The production of gas in 1985 was about 380 million cubic feet per day.

Oman is not a member of OPEC and can pursue independent production policies. However, as a member of the Gulf Co-operation Council (GCC), Oman has to maintain a close relationship with the international co-operation attempts. The current changes in oil prices have adverse affects on the economy of Oman.

In 1985, 68 per cent of Omani oil exports were directed to industrialized countries. Japan has consistently been the largest buyer of Omani oil. In 1985 Japan bought 66 per cent of all Oman's oil exports.

2. Agriculture and fishing

Agriculture has greatly declined in relative importance since the start of oil production in 1967. Agriculture currently accounts for about 3 per cent of total GDP. However, the share of agriculture in total employment is still quite substantive with a ratio of about 36 per cent.

The total cultivable area amounts to 83,400 hectares (ha), but because of lack of water the area farmed was limited to only half that amount in 1984. Productivity is quite low and the nature of the scattered small farming units makes the application of modern techniques very difficult. The Government is trying to develop networks for collection and distribution activities in the agricultural sector to eliminate constraints created by the scattered pattern.

The basic crop is dates, which covers 50 per cent of the cultivated area. Oman is self-sufficient in vegetable production, and imports almost all kinds of food from outside. Dates are the basic exported agricultural product of Oman.

Livestock production is concentrated mostly in the southern region. It is estimated that in 1982, there were 696,200 goats, 135,700 sheep, 125,900 cattle, 71,500 camels and 11,100 donkeys.[1/]

Fishing is a traditional occupation. In both the Indian Ocean and the Gulf of Oman, fish are abundant including tuna, sardines, lobsters and shrimps. The export of fishing products which was quite important until the 1970s gradually declined and Oman currently may be considered as having enough for its own needs.

The Government is making significant efforts to develop agriculture and fishing. The outcome of such efforts has been seen in the successful implementation of many projects. Training staff and building the essential institutions have been made a high priority issue by the Government.

3. Industry

Until a decade ago, the manufacturing sector was limited to small-scale handicraft establishments - weaving, pottery, silver and gold jewelry, etc. After 1970 the Government started numerous programmes and projects to stimulate industrial growth. By the mid-1970s new industries were introduced such as soft drink bottling, dairy processing and cement block-making. Subsequently larger and heavier industries started to emerge (cement plants, copper smelter).

During 1980 and 1984 the annual growth rate of manufacturing was about 31 per cent. In 1984 alone, 501 new manufacturing companies were registered. However, the share of manufacturing in GDP is still very low: it amounted to 3.2 per cent in 1985. Activity in the manufacturing sector has been severely hampered by the lack of skilled labour, by the small size of the domestic market and by the lack of domestic raw materials. The development of the manufacturing sector so far has greatly depended on expatriate labour and imported raw materials.

The Government has been participating directly in major industrial projects such as the flour mill, cement plant, copper mining and smelting and the oil refinery.

Despite many incentives, the private sector investments in the manufacturing sector have been much less than estimated in the implementation of the second Five Year Development Plan. The basic reason for this is the fact that trade and real estate still seem a more profitable field with a shorter return period.

1/ Oman, Facts and Figures, 1985, (Development Council, Technical Secretariat, Directorate General of National Statistics, Muscat 1986), (henceforth known as "Oman Facts and Figures").

Within the current Five Year Plan (1986-1990) the Government is introducing even stronger incentives for the private sector. In addition to these, the completion and additional development of industrial sites with sufficient infrastructure will play a positive role in the growth of light and medium-size industrial plants, which are currently considered as the optimum scale plants for Oman.

The Oman Development Bank (ODB) which was established in 1979 to provide financing for industrial ventures has been playing a very constructive role in the promotion of industrial enterprises.

4. Finance

The banking system in Oman has undergone rapid development since the 1970s. There are currently 25 banks licensed to operate in Oman. All the banks in Oman are overseen by the Central Bank. Nine of those are local banks. The specialized banks are the Oman Development Bank, the Oman Housing Bank and the Oman Bank for Agriculture and Fisheries.

The number of bank branches increased from 144 in 1982 to 208 in 1985. The table indicating banks licensed to operate in Oman is presented in annex XI. The Oman Development Bank operations cover the industrial development projects. The Oman Development Bank's total financing (including participation) between 1979-1985 covered 183 projects with total loans of 38.6 million rials Omani (RO). The Oman Housing Bank is responsible for promoting home ownership. The total amount of loans for 1984 was RO 10.8 million.

The Oman Bank of Agriculture and Fisheries which is operating in the sector of agricultural activities loaned a total of RO, 4 million in 1984.

In 1985 40.4 per cent of all commercial bank credits were used in trade, followed by personal loans with a share of 18.8 per cent and construction activities with 16.8 per cent.

Table 9 indicates the distribution of commercial bank credits for the period 1981-1985.

Private deposits make up 52 per cent of commercial bank liabilities, with government deposits accounting for 12.8 per cent. Of the private deposits more than half are held in the form of time deposits and around one third are in foreign currency.

Table 9. <u>Distribution of commercial bank credits</u>

	1981	1982	1983	1984	1985	1984 % to Total	1985	1984/1983 % Change	1985/1984
Trade	190.2	214.5	238.2	275.5	305.3	46.7	40.4	15.6	10.8
Import trade	(177.3)	(196.9)	(217.9)	(236.3)	(272.0)	(40.1)	(36.0)	8.4	15.1
Export trade	(0.2)	(0.4)	(0.5)	(0.1)	(4.8)	-	(0.6)		
Wholesale and retail trade	(12.7)	(17.7)	(19.8)	(39.1)	(28.5)	(6.6)	(3.8)	97.5	27.1
Mining and quarrying	3.7	9.5	8.2	11.4	10.9	1.9	1.4	39.0	4.4
Construction	55.9	65.4	68.4	83.4	127.3	14.1	16.8	21.9	52.6
Manufacture	5.1	6.1	22.0	19.3	26.1	3.3	3.5	12.3	35.2
Transport and communication	5.1	10.7	11.4	7.0	13.9	1.2	1.8	39.6	98.6
Services	5.4	11.9	16.3	17.0	21.0	2.9	2.8	4.3	23.5
Personal loans	51.8	62.8	97.1	122.8	142.4	20.9	18.8	26.5	16.0
Others	28.1	21.1	36.6	39.5	47.4	6.7	6.3	7.9	20.0
Total private sector	345.3	402.0	498.2	575.9	694.3	97.7	91.8	15.6	20.0
Government	1.1	4.5	9.8	13.8	62.3	2.3	8.2	-	
Total	346.4	406.5	508.0	589.7	756.6	100.0	100.0	16.1	28.3

<u>Source</u>: Central Bank of Oman, Annual Report 1985.

PART TWO

II. SITUATION AND RECENT DEVELOPMENTS IN HUMAN SETTLEMENTS ISSUES

A. Land

1. Density of population and land use

The majority of the population of Oman is settled in the coastal plains which cover about 9,000 square km, and the rest of the population is scattered in the valleys and nodal locations where water is accessible. In 1975 about 8 per cent of the total population was settled in the capital area which covers an area of about 380 square kms. (This is the gross area definition; in fact, the inhabitable land in this area is about 210 square kms).

In 1985, the capital area was inhabited by about 300,000 people. It was originally estimated there were 370,000 people but, owing to stagnation in economic activity in recent years, the population of the capital area is now estimated at 300,000,1/ which is about 15 to 25 per cent of the total population of Oman, depending on which estimate i.e., 1.2 million or 2 million is used.

The density in the inhabited capital area for 1985 is estimated to be between 790 and 1,430 persons per square km, depending on the definition of the area as 380 or 210 square kms.

On the other hand, the overall density for Oman is quite low, with 4 or 6.6 persons per square km, depending again on the estimation of total population as 1.2 or 2.0 million.

There are no data for the country's land use for majority of the sectors. One of the main uses of land is farming. The total farming area in Oman is 83,360 hectares, which is about 0.3 per cent of the total land area of the country. The actually cultivated area is 41,024 hectares, which is about 0.14 per cent of the total land area. More than half of the total farming and cultivated land is in the Batinah and capital regions. The total area under permanent crops in Oman (fruit trees) was 28,129 hectares in 1984.2/

The distribution of farm land, actually cultivated land and the number of agricultural holdings in the regions of Oman is presented in annex XII.

2. Land tenure

In Oman the registration of land ownership is quite new. In the rural areas, owing to the problem of water scarcity, the settlement patterns have evolved in a dense, tribal way. Individual ownership of land has been recognized in the rural settled areas; there is a communal ownership pattern

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1/ Information received from the Ministry of Housing.

2/ Statistical Year Book of Oman, pp. 150-151.

on the surrounding fringe. The falaj systems have been the basic cause for the development of this land ownership pattern. The falaj means a system for distribution of water amongst those who have established rights to a source of supply. The word falaj is commonly used to mean the whole of the irrigation channel system downstream from where the water originates, with sometimes two to six miles of tunnels underground. The communities depending on falaj have been considered as self-sufficient. A normal falaj supports about 1,000 people with an irrigation possibility of 40 to 50 hectares of land.[1/]

Until the 1970s the ownership of land in urban areas also was subject to traditional transactions without comprehensive records and registration system.

Since the 1970s there have been many laws and regulations enacted for land issues which have covered the following distribution of cultivated land (1972); land organization (1972); organization of the administrative system (1975); establishment and organization of the capital municipality (1975); expropriation (1978); decree assigning the Ministry of Finance responsibility for public property (1977); and decree of rules and regulations for land (1980).[2/]

According to the legal framework, all the land in Oman belongs to the State, unless otherwise defined and legally registered. State property falls into two categories: first, public State land, which keeps its status unless the public benefit definition is officially deleted; and secondly, the private State land, which can be utilized (used, sold, etc.) by public bodies within the scope and means of the current laws and regulations. The pieces of land proved to be the property of Omani citizens will be excluded from the State property definition.

The Waqf property is certified by a deed from the Ministry of Justice, Awqaf and Islamic Affairs. Any disagreement appearing between the Ministry of Awqaf and the Ministry of Housing, regarding the status of any piece of land (or a portion of a piece of land) will be settled with the Council of Ministers. The Waqf land is legally protected by restrictions on buying, selling and renting. Waqf land cannot be subject to expropriation without approval by the Ministry of Awqaf.

All private land in Oman has to be registered. An Omani citizen occupying (or cultivating) any property/land prior to 1 January 1970 has the right to register such property in his name, provided there are no other claims on the land. The Ministry may sell and or rent the State land to Omani citizens. In such actions priority is given to the local residents. The usage of land, either bought or rented, should be in conformity with the master plans.

1/ Oman and its Renaissance, (Stacey International, 1984), pp. 109-135.

2/ Sultanate of Oman, "Rules and regulations for land" Decree 1980/1985 (in Arabic).

The Ministry of Housing is in charge of the investigations and procedures regarding all land claims. Deeds are issued when the claims are found to be relevant. There is a significant trend to claim extension of the limits of land plots. The individual claimants usually apply to extend the dimensions of their plots towards land which has not yet been registered. This trend is very common among owners of plots on slopes where the owners want to extend the limits towards the mountains.

All the registration and sales procedures for land take place in the Ministry of Housing. The Ministry has eight regional offices where all activities on land are undertaken in addition to the central offices in the capital. There is a token fee collected by the Ministry for the sales procedures of land. In recent years, the registration of plots and land and all transactions have gradually come to be handled by computers. Information about the land and the owner, including the sales value, is stored in computer systems in the Ministry of Housing. Recently there a project was initiated with the assistance of the United Nations Centre for Human Settlements for further development of the use of computers to register land titles and related transactions.

All the public and private State land is registered at the Ministry of Finance. The Ministries and other governmental or public organizations have the land they need through allocations from the Ministry of Finance.

3. Development procedures

The Ministry of Housing has been given the responsibility of surveying and preparing maps and development plans and registering land ownership, subdivisions and the operations of all sales procedures. All of the eight regional offices of the Ministry have surveying, planning and land registration departments where the relevant work is locally processed and completed.

The owners of private land may apply to the Ministry for subdivision of their land. The Ministry examines the proposals brought by the developers and approves them when they are found to be in conformity with the master plans. The Ministry registers the subdivisions in such cases, and gradually the sales procedures of the newly formed plots may take place. The Ministry has the right to alter the proposals according to the current plans and zoning regulations.

Besides carrying out many registration studies of the private plots, the Government of Oman is giving utmost importance to the distribution of State land set aside to be given to Omani citizens. The distribution of State land is taking place in two ways: by registering the claims for the already occupied land and by granting Omani citizens new plots for distribution.

For the claims, the year 1970 has been identified as the legal base year and the rules and regulations are prepared in a way to legitimize the land ownership and/or land occupancy (usage) pattern at that time. All the claims for land have to be submitted to the Chairman of the Central Committee in the Ministry of Housing. The claims are then examined by the Settlement Committee, which is comprised of the chairman (who is specialized in this field and assigned to the Ministry of Housing), the governor of the region (or his delegate), the delegate of the real estate registration department and a surveyor from the Planning Department of the Housing Ministry. The claims processed by the Settlement Committee come to the Central Committee for authorization and then the deeds are issued. The Central Committee may reject the claim and may decide that the land claimed should be vacated and impose a punishment/fine, or the Committee may partially or totally approve the claim. The status of the claimant (his living standards, income, family characteristics) is considered in the evaluation of the claim.

The claimants of land either for the already occupied plots or for the new plots from the Government must be the supporters of families; priority is given to the ones who have not bought land from the Government previously. The land bought has to be used for the purpose indicated.

After the evaluation of the applications for a specific land distribution programme, the entitled citizens are chosen and are informed publicly. The entitled citizens have to pay the price of the plot which is fixed by the Ministry of Housing within two months. When the full payment is made, a certificate of temporary ownership of the plot is issued to the applicant which can be used as a deed (title) for construction permits and for application for construction loans. After the construction is completed it becomes obvious that the distributed land has been used for the purpose of the distribution and the temporary titles are changed to permanent titles.1/

The Omani citizens are entitled to receive four types of plots from the State, namely residential, commercial, industrial and agricultural. The residential plots cannot be larger than 1,000 square metres. The size of the commercial plots are usually quite small (shop size), the industrial plots are between 1,000-6,000 square metres and the agricultural plots have to be larger than 3 feddans (1 feddan equals 4,200 square metres) and smaller than 10 feddans.

In table 10 the number of plots distributed since 1970 (excluding the distribution in the capital area) is presented.

Table 10. Total number of plots distributed since 1970 (excluding the capital area)

Type of plot	Number	Size m^2
Residential	30,716	(400-1,000)
Commercial	3,406	--
Industrial	672	(1,000-6,000)
Agricultural	7,642	(3-10 feddans)

Source: Omani Ministry of Housing.

1/ Oman, Ministry of Housing, "Procedures of land use", 1982, (in Arabic).

In addition, about 21,000, agricultural plots are distributed to citizens and they are using the plots on a rental basis. They will receive their titles when the three year period of cultivation is completed.

In the capital area, about the same amount of plots (except the agricultural plots) has been distributed. In the majority of the residential plots distributed, housing construction has already been completed. The size of the residential plots distributed in the capital area has been comparatively smaller than that of the residential plots distributed in other regions.

Tables for plots alloted by the Ministry of Housing in the capital area by plot size from 1977 to 1984, and outside the capital area in 1984 are presented in annexes XIII and XIV.

4. Public revenues from land and land values

The revenues obtained from land by the State and municipalities are very limited in Oman. There is no real estate and land tax. In the land transactions there is a token fee collected by the Ministry of Housing which is the only revenue besides the amounts received from the sales and rentals of the plots.

The prices of the plots sold by the Ministry of Housing are very low in comparison with the market values, (usually about 10 per cent). The sale of State land is rather considered as a public welfare project and a tool for implementation of development plans. The price of the residential land provided by the Ministry of Housing is as low as 1 rial per square metre. The rents fixed for the State land are also quite low. For agricultural land, for example, the initial contract is for three years with an annual rent of 3 rials per feddan. The tenants may have the ownership of the land later if they keep up with their agricultural activities.

The expropriation of land by the public sector, on the other hand, is carried out according to current market values. The Government sets the rate of expropriation which is sometimes even higher than market values. The owners of land subject to expropriation may appeal to the court in case of objections to the amount of compensation they receive. So far there has been only a few such cases. Sometimes it is possible for the Ministry of Housing to exchange plots for the land subject to expropriation. In such cases, the owners of land who lose their property by expropriation receive similar plots from the Government free of charge.

Another way that the public sector obtains land is the 30 per cent share of the land subject to subdivision. When the developers apply to the Ministry of Housing for their subdivision proposals, 30 per cent of their land has to be left to the public sector for public uses such as roads and kindergartens.

Land prices are set by market forces in the private sector and changes due to many factors. Good location for commercial activities and accessibility are the two basic factors affecting price increases. The sides of main roads are usually more expensive than the inner locations. According to a recent study made by the Oman Housing Bank, the value of 1 square metre of land is between RO 15-300 in the capital area. The highest land values are observed in Ruwi, in the central business district, with about RO 300 per m^2. In the other parts of Ruwi the values differ from RO 40 to RO 120. The internal areas are least valuable. Qurum and Medinat Qaboos locations offer the most fashionable land for high income residential developments: The land prices in such locations are about RO 140 per m^2. The prices go down as the distance from the centre increases. In Seeb, for example, the value of land is about RO 15-20 per m^2. Information on land values in the capital area is presented in table 11.

Table 11. Land values in the capital area (1986)

	Area	Rates/m^2
		Omani Rials
1.	Ruwi	
	(a) C.B.D. Area	300,000/m^2
	(b) Near Ministry of Commerce and Industry	120,000/m^2
	(c) Beside the Sheraton Hotel	90,000/m^2
	(d) Internal Ruwi, Hamriya	40,000 per sq.m 50,000 sq.m 70,000 m
2.	Muscat	40,000 to 50,000/m^2
3.	Muttrah	40,000 to 50,000/m^2
4.	Qurum	90,000 to 140,000/m^2
5.	Medinat Qaboos	90,000 to 140,000/m^2
6.	Al Khuwair	65,000 to 70,000/m^2
7.	Seeb	15,000 to 20,000/m^2
8.	Al-Khodh, Mobela, Seeb, Wadi Hatat Wadi Adey, Al Amrat	15,000 to 20,000/m^2

Source: Oman Housing Bank.

5. Land policy

In Oman, the policy concerning land issues is not explicitly formulated. However, the accomplishments since 1970, both in terms of institutionalization of the relevant issues and assigned responsibilities, and the incentives for development generated by the land distribution process, are significant. Land has always been accepted as a means to accumulate wealth in Oman and the absence of any sort of taxation on landownership has even strengthened this trend. Government policy for the distribution of State land, on the other hand, ensures utilization of the land immediately after sale and thus prevents the holding of the land received for speculative purposes. The State land is first allocated to the citizens on a rental basis and ownership is established only after the construction or utilization of the land is completed. Since the prices of government distributed-land are so low and easily affordable all Omani citizens who can afford to manage to undertake further activities (such as constructing a house or cultivating land). They have almost no problem with provision of land at the basic levels.

The distribution of State land has been recognized as a means to income distribution and social justice. The revenues obtained from the land sales have never been considered as an important source of income to the Government. The fees charged to the citizens may rather be considered as a tool to make the distribution process, especially the application stage, more serious.

The policy of land use in Oman is aimed towards an optimum level of concentration of settlements with the minimization of infrastructural costs and comfortable densities on the one hand, and the preservation and promotion of valuable arable land on the other. The land suitable for urban development is at the same time good for agricultural uses and unfortunately this creates competition over a small share of the country.

In Oman, as in many other countries, where the same dilemma of competition of urban versus agriculture use, is very strong, the urban uses will tend to increase their densities. In the capital area, this trend is now significant with the pressures of increasing land prices in conflict with current policy to protect arable land.

Private land prices in Oman usually keep up their levels and are not very much affected by the economic fluctuations. In recent years, for example, when prices of many items including construction materials and housing stagnated and even declined owing to the general economic recession, land prices did not decline. This may be explained by the unwillingness of the owners to sell their land in the expectation that demand for land would again increase in the future and so would prices. This wait and see position is supported also by the cost situation of keeping the land. Since there is no taxation or other measures encouraging the use of land, the owners, if they are able, naturally with choose to wait for more favourable opportunities.

B. Physical planning

1. Scope of Planning

Since 1970 Oman has made considerable progress in its efforts to give structure to its economy and its growth; this has been achieved through plans and programmes. The First Five Year Development Plan covered the period 1976-1980, followed by the Second Plan for 1981-1985. The Third Plan finalization studies were almost completed by October 1986.

The development plan preparation studies comprised the evaluation of each sector through assessments made for the past and present and proposals for the activities for each sector for the plan period. These assessments and proposals are prepared by the Ministries and relevant governmental bodies. The plan preparation, legal, co-ordination and follow-up functions and responsibilities are given to the Development Council.

The physical planning dimensions and settlement issues are integrated with the sectoral development contents of the five-year plans. The First Five Year Plan had the following long-term targets and policies relevant to physical planning:

- To distribute national investments among geographical regions with a view to spreading prosperity and progress to all regions of the Sultanate, reducing differences in the standard of living between these regions, and assigning a special priority to the least developed areas.

- To support the maintenance of existing population centres and communities, to safeguard those communities from potential emigration to densely populated urban centres and to protect the environment.

- To attach high priority to the development of natural water resources as a prerequisite to continued economic activity and growth.

- To attach high priority to the development of local human resources and to improve their capability to contribute to the national economy.

- To meet infrastructural requirements.

The long-term development strategy of the First Plan still prevails with the targets changed according to the stages of development accomplished during the implementation of the First and Second Plans.

The short-term targets and policies of the Second Five Year Plan (1981-1985) put additional emphasis on expand the programme of constructing low-cost housing particularly in the interior, expanding the network of vocational training centres, especially in regions other than the capital area and orienting training programmes to suit traditional productive activities in those areas to support decentralization of growth.

2. National urban policy

Until 1970 Oman was an underdeveloped country with virtually no government administration, no schools, only 10 kilometres of asphalt road, three small hospitals, and almost no social services. The settlement pattern reflected the weak level of economic activity, with the population and almost all activities concentrated on the coastal ribbon. After 1970, the very fast growth of the economy, spread of the road network, creation of an infrastructure and institutionalization of the government and public functions led to a significant physical development process, especially in the capital area.

The national urban policy in Oman may be characterized by the concepts of "spread of growth" and "development of the secondary cities". The capital area, even though it assumes the primate functions in the urban hierarchy cannot be identified as an urban cluster the growth of which should be limited and the functions decentralized.

The ratio of the capital area population to the total population and the settlement problems faced do not favour the implementation of strict decentralization policies. The population of the capital area is about one fourth to one seventh of the total population (depending on the estimate of the total population) which indicates a low primacy rate in comparison with the other countries of the region. The planning thresholds on the other hand also show that there are possibilities for the further development of the capital area with utilization of the economies of scale principles. In conformity with these facts, the Omani Government aimed to follow a strategy of balanced growth between the capital area and the rest of the country.

The Government investments actually realized in the 1976-1980 plan period and the planned government investments in the 1981-1985 plan period indicate balance and consistency. The Second Five Year Plan aimed to direct 28.0 per cent of the total government investments to the capital area, which received 27.8 per cent in the previous period.

The southern region of Oman received a significant share of 23.8 per cent of the total government investments in the Second Plan Period. Other regions shared the rest of the government investments, close to about 50 per cent of the total.

Information on the geographical distribution of government investments is presented in table 12.

The private sector investments, on the other hand, do not necessarily follow this rather balanced distribution of the government investments and have the tendency to be concentrated in the capital area. Private investments formed 22 per cent of the total investments in the First Plan and 28 per cent in the Second Plan Period. The amount for the Third Plan Period foreseen to be 35 per cent. Private investments are concentrated on the sectors of oil, industry and housing.

Table 12. Geographical distribution of government investments

Region	Actual 1976-1980		Planned 1981-1985	
	OR m	%	OR m	%
Capital area	334.8	27.8	599.4	28.0
Southern region	300.9	25.0	510.6	3.8
Musandam[a/]	N.A.	N.A.	41.9	2.0
Other regions	567.9	47.2	990.5	46.2
Total	1,203.6	100	2,142.4[b/]	100

Source: Oman, Second Five Plan, p. 55.

a/ Development expenditures in Musandam for the period 1976-1980 is included in other regions.

b/ Including the Government share in PDO capital expenditures which was assumed to be distributed as follows: 2 per cent in the capital area. 43 per cent in the southern region and 55 per cent in other regions. Also a sum of RO 12.6 million representing the cost of acquiring embassy buildings abroad is excluded.

The policy for the development of secondary urban centres has been supported not only with the dispersion of government investments, especially with involving infrastructures but also with the formation of effective local administrative offices. The eight regional offices of the Ministry of Housing in the governorates of Masana'a, Saham, Sohar, Ibri, Baraimi, Nizwa, Ibra and Sur are good examples of implementation of this policy.

The targets and policies for the town planning and municipalities sector have been stated in the second Five Year Plan as follows:

- To make available land suitable for urban extension and to distribute it to eligible citizens;

- To conduct town planning with the aim of improving the outlook of the towns and villages and of providing extra land to meet the requirements of population growth;

- To establish public parks;

- To expand municipal services and utilities.

The list of the important projects relevant to town planning and municipalities, stated in the Second Five Year Development Plan for implementation during the plan period, is presented in annex XV.

3. Regional activity pattern and regional planning

Since 1970, in spite of the fast development process and spatial planning studies to control and channel this growth, the scale of regional planning and regional planning concepts have not received much attention in Oman. There are two reasons for this situation.

First, the current structure is mature in relation to the physical thresholds and thus there has been no need for any attempts to alter it. Secondly, since the physical planning studies on settlements are in line with the national development plan directives and concepts there has been no need for an intermediate level approach to regional planning.

The settlement structure in Oman may be described by a simple diagram of two ribbon-like developments; the first is located on the shoreline in a north-north-east direction and is also parallel to convenient locations inland in the Al-Hajar mountain range in the Batinah; the second is concentrated in the southern (Dhofar) regions.

In the Batinah region these two parallel development ribbons are connected only in a few passages due to the physical barriers of the mountains. Towns like Al-Buraimi, Nizwa, Manah, Iski, being on these connections, have developed faster than others. The road network and the telecommunications system is vitally important for the development of economic activities. The number of registered companies and establishments according to regions is a good indicator for the distribution economic activity. By the end of 1984, there were 22,808 registered companies and establishments in Oman of which 7,520 (33 per cent) were located in the capital area. When the ratio of establishments in the capital area is compared with the ratio of the population, it is observed that the concentration of registration of establishments is higher than the concentration of population, which is estimated to be between 25.0 and 14.3 per cent.

The Batinah area, with 5,139 units, is the second major region in the country, with a concentration of registered businesses (22.5 per cent). The Batinah region and the capital area together have more than 55 per cent of the total number of establishments in Oman. The capital area had its peak development in the years of 1975-1976 with about 1,400 registrations per year. After the period of stagnation between 1977 and 1982, the capital area gradually had an increase in the number of new registrations. In 1984, there were 909 new registrations in the capital area.

The Batinah area seems to be developing faster than the capital area in recent years. The trend of new registrations in this region has been quite stable since 1975 and had its peak in 1984 with 1,211 (28 per cent of the total for 1984) new registrations. Information on the distribution of registered businesses in regions is presented in table 13.

However, the large-scale registered businesses are generally concentrated in the capital area. In 1984, there was a total of 20 registered businesses in the capital area, with capitals of over RO 5 million. With the same amount of capital, there were only two establishments in Salalah and, there were none in the other regions. In the Batinah region there were only two establishments with a capital range of RO 1 to 2 million and they were the biggest enterprises in that region. Information about the capital range of the establishments in the regions is presented in table 14.

The proportion of the country's registered industrial establishments located in the capital area in 1984 was 18.7 per cent which was close to the proportion of the country's population living in the capital area. The Batinah area, on the other hand, had 23.3 per cent of the country's registered industrial establishments. It should be noted that the Batinah Area has been developing very rapidly since 1980. In 1984, 138 new industrial units (27.5 per cent of the total for 1984) were established in the Batinah area, whereas the number was 69 units (13.7 per cent) for the capital area.

Information on the distribution of registered industrial establishments by geographical regions (1975-1984) is presented in table 15.

The Omani Government is giving importance to the development of industries in especially prepared industrial zones. One of the Government's most enterprising initiatives has been the development of the Rusail industrial estate, 15 km from Seeb International Airport, in the capital region. Production of concrete blocks, vehicle batteries, plastics, paints, footwear, fibreglass and some food industries are located in this area. Early in 1985, the first phase of the estate, covering 90 hectares and comprising 109 plots with basic facilities such as water, electricity, communication and sewerage, was completed. The second and third phases, which are almost completed in the design stage, will add a further 45 hectares to the estate. Plans are under way for establishing the second industrial site in the Salalah region.1/

1/ Oman, Ministry of Information, Oman 85, p. 56.

Table 13. Registered companies and establishments by geographical area (1974-1984)

Geographical regions	1974 a/	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	Total	%
Capital area	207	1,431	1,424	456	475	470	432	395	614	703	909	7,520	33.0
Musandam area	--	--	3	14	11	18	15	17	24	29	22	153	0.7
Batinah area	5	207	332	307	277	603	295	445	789	668	1,211	5,139	22.5
Western Hajar area	--	11	24	24	32	71	40	61	100	100	245	708	3.1
Eastern Hajar area	1	15	58	78	82	129	98	135	274	228	297	1,395	6.1
Dhahirah area	--	16	44	78	74	212	70	124	253	189	497	1,557	6.8
Jau and Buraimi area	--	8	7	31	18	59	39	92	60	65	106	485	2.1
Interior area	1	29	99	134	68	187	89	125	239	265	378	1,614	7.1
Jaalan and Sur area	2	43	132	218	137	275	121	216	276	211	382	2,003	8.8
Southern area	-	391	265	175	97	128	112	201	240	344	281	2,234	9.8
Total	216	2,151	2,388	1,505	1,271	2,152	1,311	1,815	2,869	2,802	4,328	22,808	100.0

Source: Statistical Year Book, 1985.

a/ Including the numbers registered before 1974.

Table 14. The registered establishments according to their capitals and regions (1984)

Thousand rials Omani (capital)	Regions										
	Capital	Musandam	Batinah	Western Hajar	Eastern Hajar	Dhahirah	Jau & Buraimi	Interior	Jaalan & Sur	Southern	Total
2 under 5	2,164	27	1,287	124	291	255	85	291	210	476	5,210
5 under 10	1,234	20	1,702	240	368	543	105	431	392	490	5,525
10 under 25	2,293	87	1,948	310	692	683	231	773	1,285	739	9,044
25 under 50	641	10	129	28	27	49	36	71	85	301	1,377
50 under 100	512	4	51	4	13	23	19	33	23	111	793
100 under 250	449	5	17	2	3	4	7	14	8	70	579
250 under 500	133	--	3	--	1	--	1	1	--	25	164
500 under 1,000	41	--	--	--	--	--	1	--	--	10	52
1,000 under 2,000	20	--	2	--	--	--	--	--	--	5	27
2,000 under 3,000	9	--	--	--	--	--	--	--	--	4	13
3,000 under 4,000	3	--	--	--	--	--	--	--	--	1	4
4,000 under 5,000	1	--	--	--	--	--	--	--	--	--	1
5,000 and over	20	--	--	--	--	--	--	--	--	2	22
Total	7,520	153	5,139	708	1,395	1,557	485	1,614	2,003	2,234	22,808

Source: Statistical Year Book, 1985.

Table 15. Number of registered industrial establishments by geographical regions, 1975-1984)

Geographical regions	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	Total
Capital area	10	41	36	21	29	43	29	40	58	69	376
Musandam area	-	-	-	-	-	-	2	5	3	1	11
Batinah area	-	4	3	5	2	52	99	77	88	138	468
Western Hajar area	-	-	-	-	-	11	9	13	12	23	68
Eastern Hajar area	-	-	-	1	1	5	14	20	18	19	78
Dhahirah area	-	-	-	1	2	15	20	21	15	23	97
Jau and Buraimi area	-	-	-	-	1	2	12	9	4	9	37
Interior area	-	1	-	-	1	16	24	59	63	62	226
Eastern area	-	-	-	2	2	14	28	56	39	55	196
Jaalan and Sur area	-	2	1	1	38	36	45	47	49	70	289
Southern area	-	2	1	-	-	1	37	55	33	32	161
Total	10	50	41	31	76	195	319	402	382	501	2,007

Source: Statistical Year Book, 1985.

4. Planning of the capital area*

(a) Definition of the capital area

The capital area is defined as the coastal plain facing north between Muscat and the western reaches of Seeb, a distance of about 50 km. The eastern boundary is the rocky shore from Muscat to Bustan, and the western limit is the western branch of the Wadi Al-Khod. The incline of the Oman mountain range, of about 5 to 8 km from the shore, strongly defines the southern limits. The defined area contains about 378 square km, which is called the gross planning area. Only about 216 square km of this total can actually be considered for planning, the rest being either very steep or subject to flooding or other constraints. In addition there are three large bowls of open land, set behind or into the mountain range, which offer about 120 square km of land for development.

(b) Population

The population of the capital area indicates a rapid growth, from an estimated 56,000 persons, mostly Omani, in 1970 to an estimated population of about 300,000 in 1985. The 1985 population figures for the capital area estimated about 170,000 Omanis, with the rest expatriates. The greatest rate of increase was observed during the years of heavy development spending in 1973-1977, which required a large influx of foreign population. The average increase rate of the Omani population in the capital area has been surprisingly low. While the total annual increase rate has been about 15 per cent, the Omani annual population increase rate has been around 7 and one-half per cent. When the natural annual increase rate of the Omani population, which is about 3 and one-half per cent, is subtracted, it is observed that the immigration of Omanis from other locations, including the return of overseas Omanis, was only about 4 per cent. There are a number of factors for this low rate.

First, the relative closeness of most settled areas to the capital, with the provision of very good transportation (very good highway networks) permitted young Omanis to work in the capital area while maintaining their families in their traditional communities.

Secondly, many technically qualified Omanis have found jobs in other parts of the Gulf; this is likely to change gradually as Oman's development continues and wage scales begin to reach those elsewhere.

Thirdly, the recent spread of education to the interior of Oman is beginning to produce secondary school graduates in large numbers with the technical skills required to fill the modern development jobs available in the capital area.

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* Information from the Omani Ministry of Housing.

The short-term population growth in the capital area will reflect the capital spending programmes of the Government and the incentives of the private sector. It was estimated earlier that the expatriate population would annually increase by about 24,000 between 1980-1984, compared with increases of about 15,000 in previous years. However, the stagnation of the economy in general and the prospective problems of the balance of payments limited the number of incoming expatriates and the estimate of a stabilized number of 200,000 expatriates in 1985 was not realized. It was also estimated that the newly arrived expatriates, technicians and service workers needed to staff new facilities, replacing a proportion of construction labour, would likely belong to higher income categories, putting greater demand on housing and other facilities.

It is estimated that the capital area will attract more population from the other parts of the country owing to the factors below:

(i) The increased number of secondary school graduates in the countryside will not only seek better employment but the more varied lifestyle the capital provides;

(ii) Young men who generally came as single, often as commuters, for government and military service will bring families and establish permanent homes in the capital;

(iii) The shortage of housing in the capital area in the past has been eased lately by the effective land distribution programmes of the Ministry of Housing and the increase of housing production in general.

The Omani population in the capital area is assumed to continue its growth at about 6 to 8 per cent per year through the rest of the century. It is also estimated that, by the year 2000 the capital area will have about one third of the total population in Oman. The estimates of population for the capital area (1980-2000) are presented in table 16. However, the estimate for the year 1985 should be considered at a lower level with about 300,000 people.

Table 16. Population estimate for the capital area

	1980	1985	1990	2000
Omanis	118,000	170,000	243,000	486,000
Expatriate	108,000	200,000	200,000	200,000
Total	726,000	370,000	443,000	686,000

Source: Omani Ministry of Housing.

(c) Land use

The physical nature of the capital area and its historic development give definition to a number of planning districts.

(i) Eastern capital area. Containing the historic centres of Muscat and Mutrah, traditional villages on the East Coast and the modern development almost filling the Ruwi Valley. Although this district has only about 5 per cent of the usable land, it presently contains more than half of the population in the capital area. The eastern capital area is limited by the mountains to the south and because almost all development land is already committed further growth will have to take place through reconstruction.

(ii) Qurm area. This area with low densities and desirable residential features will act as the suburbs to the commercial activities and governmental offices developed in the east capital area. About half of the potential land in this area has already been built. Oil terminal and related industries at Mina Al-Fahal and medical facilities are also in this area.

(iii) Adheiba area. This district sits at the geographic centre of the capital area, with the greatest potential for future development as the commercial/industrial focus surrounded by new residential developments. Major building activities to date consist of a government centre, the large industrial district of Ghala and residential areas in the Khuwair location.

(iv) Airport area. The area is dominated by the airport facilities, its restricted zones and future expansion possibilities. There are also military reserves of the capital and early developments for residential use in the Airport Heights. In the western parts of the area, industrial zones have been established.

(v) Seeb area. This is rather the rural belt of the capital area, with traditional farming and fishing communities. The construction of the university will cause rapid development of residential areas in this region. Projects for a new community at Mabila are already under way.

The interior bowls at Hajar, Lansab and Rusail are also prospective areas for future growth. The Hajar Bowl has been planned for industrial and residential uses, the Lansab area, which is currently under military jurisdiction, will be merged with the land uses of the Adheiba area, and the Rusail Bowl is predominantly planned for industrial use, i.e., a cement plant, gravel extraction and crushing. There will also be a residential area for the workers.

In table 17 information on the land use plan for the capital area is presented.

Table 17. Land use plan for the capital area

	Gross planning area	Gross development area	Residential area	Commercial industrial area	Government institution area	Unassigned or other use	Remarks for numbers marked*
Eastern capital area	1,750 ha	1,060 ha	541 ha	281 ha	103 ha	135 ha	
Incl: Muscat & East Coastal	330	206	80	3	23	100*	Bustan areas
Mutrah	240	152	83	63	6	-	
Ruwi valley	920	517	286	136	60	35*	Darsayt areas
Wadi kabir	260	185	92	79	14	-	
Qurm area	3,150 ha	1,527 ha	968 ha	268 ha	176 ha	115 ha	
Incl: Wadi Adai to Mina al Fahal	920	347	105	154	88	-	
Qurm north	840	368	239	14	40	75*	Qurm Nature Preserve
Qurm south	700	396	312	56	28	-	
Medinat Qaboos area	450	276	192	44	-	40*	Former "cement factory site"
Ocean beach	240	(140)	(120)	-	(20)	-	
Adheiba area	7,270 ha	4,187 ha	1,950 ha	1,281 ha	736 ha	220 ha	
Incl: Khuwair	1,290	809	489	115	205	-	
Ghubra	1,260	775	395	173	137	70*	Gubra Hill
Adheiba coastal	840	489	266	73	-	150*	Under airport noise
Adheiba comm./industrial	1,350	864	-	720	144	-	
Ghala/bawshar heights	2,030	(1,000)	(600)	(200)	(200)	-	
Bawshar conservation area	500	(250)	(200)	-	(50)	-	
Airport heights	9,300 ha	6,250 ha	1,090 ha	2,300 ha	1,530 ha	1,330 ha	
Incl: Airport zone	3,725	2,770	210	1,360	-	1,200*	Airport expansion to sea
Airport heights	1,630	1,090	800	-	160	130*	south valley
M.A.M. zone	2,290	1,370	-	-	1,370	-	
Mwala	975	510	80	430	-	-	
Rusail industrial est.	680	510	-	510	-	-	
Seeb area*	16,360 ha	8,565 ha	3,890 ha	400 ha	1,695 ha	2,580 ha	
Incl: Seeb Coastal	4,100	2,470	1,460	100	260	650*	Polo area
New Al Khod/Hail	2,300	1,200	1,100	-	100	-	
South Mabila	3,290	(2,080)	(1,330)	(300)	(450)	-	
Flood Plain	2,040	(500)	-	-	-	(500)*	Possible agriculture or military
Wadi Khod East	1,770	(885)	-	-	(885)*	-	Inc. university site
Wadi Khod West	2,860	(1,430)	-	-		(1,430)*	Possible military or residential
Main area totals	37,830 ha	21,589 ha	8,439 ha	4,530 ha	4,240 ha	4,380 ha	
Hajar Bowl study area	12,400 ha	(7,000 ha)	(2,800 ha)	(1,400 ha)	(1,400 ha)	(1,400 ha)	
Lansabe study area	4,100 ha	(2,300 ha)	(920 ha)	(460 ha)	(460 ha)	(460 ha)	
Rusail study area	5,100 ha	(2,900 ha)	(580 ha)	(1,160 ha)	(580 ha)	(580 ha)	
Expanded area totals	59,430 ha	33,789 ha	(12,754 ha)	(7,535 ha)	(6,680 ha)	(6,820 ha)	

Source: Omani Ministry of Housing.

The gross development area is 33,789 hectares including the Hajar bowl and Lansab and Rusail areas. Without these three locations the gross development area is 21,589 hectares. For residential uses there will be 8,439 hectares (39.1 per cent of the gross development area) and for commercial and industrial uses there will be 4,530 hectares (21.0 per cent). Government and institutional areas will cover 4,240 hectares (19.6 per cent) and the unassigned or other uses will be 4,380 hectares (20.3 per cent).

Within the expanded total area (including three locations) which is 33,789 hectares, the proportion of land for residential use will be 37.7 per cent, for commercial and industrial uses 22.3 per cent, for government and institutional use 19.8 per cent, for unassigned or other uses 20.2 per cent.

(d) Building regulations

The land use development plan for the capital area is complemented with zoning regulations prepared within 6 groups and 16 subgroups. The regulations cover minimum plot size, maximum height, minimum "set-back" distances, maximum plot coverage, maximum plot ratio and minimum requirements of on-site parking. The minimum plot size for the residential areas is 200 square metres, with a maximum of 900 square metres. The residential buildings can be up to eight storeys the maximum height. The maximum plot ratio for this, the most dense residential use, is 2.5. A plot of 900 square metres in other words, will have an overall construction area of 1,350 square metres which may be split within 8 storeys. If one flat is assumed for each storey, in such a residential layout, there will be around 90 housing units per hectare (in net residential density). In the workshop buildings, accommodation for labour is allowed in the second storey.

The car parking requirements for residential uses in the apartment blocks or town houses is one parking area per housing unit. In the family housing layouts where the housing units may be comparatively larger than town houses or apartment blocks, the parking requirements are calculated per plot, with one parking area for approximately each 400 square metres of the plot.

Parking requirements for offices and commercial and light industrial uses are calculated on the basis of constructed areas. The allotment is one parking area for each 35 square metres of construction in the commercial zones, 50 square metres for offices and workshops and 100 square metres for light industry and warehouses.

Land used for heavy industry, government and institutions and reservations for public uses and special planning districts have special zoning regulations to be evaluated by project briefs. The special conditions indicated take precedence over the general zoning regulations. Information on the zoning regulations for the capital area is presented in table 18.

5. Physical planning procedure

According to the recent reorganization of the Ministries and governmental organizations, the Ministry of Housing became the basic government agency for urban issues and the sole agency responsible for physical planning procedure.

Table 18. Zoning regulations for capital area

MINISTRY OF LAND AFFAIRS AND MUNICIPALITIES
INTERIM LAND USE AND ZONING REGULATIONS: SUMMARY TABLE

Zoning	principal use	Min. plot size	Max. height	Min. set backs: Front	Rear	Side open	Side closed	Max. plot cover	Max. plot ratio	Min. on-site parking	Remarks
H_a	Villas in Farms	Special Regulations									
H1	1-2 Family housing	900	2 St	8	5	3	3	30%	0.5	2 Cars	Levelling floor or Penthouse
H2	1-2 Family housing	600	2 St	5	3	3	2	40%	0.6	2 Cars	50% or less of ground floor
H3	1-2 Family housing	400	2 St	3	3	2	0	50%	0.8	1 Car	Permitted within max. plot ratio
H4	1-2 Family housing	200	3 St	0	3	2	0	60%	1.0	-	Existing plots only, no new plots
F1	Flats and town houses	400	3 St	0	3	2	0	60%	1.5	1 Car per flat	Check plans for special "set back" conditions.
F2	Flats and town houses	600	5 St	0	5	3	0	60%	2.0	1 Car per flat	
F3	Flats and town houses	900	8 St	0	8	5	0	60%	2.5	1 Car per flat	
C1	Offices	see Corresponding F Designation								1 Car/50 Sq.m	
02	Shops and showrooms	400	2 St	0	3	3	0	60%	1.5	1 Car/35 Sq.m	Mezz. 50% or less of ground floor permitted within max. plot ratio
		or Ground floor of Corresponding Designation									
I1	Workshops	400	2 St	5	3	3	0	60%	1.5	1 Car/50 Sq.m	Labour accommodation in 2and storey permitted.
I2	Light industry and warehouse	900	10 m	8	5	3	3	60%	1.0	1 Car/100 Sq.m	No labour accommodation in industrial buildings
I3	Heavy and noxious industry	Special regulations									
G	Government and institutions	Regulated by project brief									
R	Reserved for public use	Regulated by project brief									
S	Special planning dist.	Regulated by project brief									

Source: Ministry of Housing.

Note. Special conditions shown on plans take precedence over these regulations

The Ministry of Housing has its responsibility and organization covering the issues of land, physical planning and housing. With the responsibility for the issues of land and physical planning in the same organization, efficient handling, and co-ordination of relevant procedures are ensured.

The Ministry prepares all the plans for the settlements except in the governorates of Musandam and Dhofar where the preparation of physical plans are commissioned by the governors. The first planning studies were initiated by the consultants working in different relevant governmental organizations in the early 1970s and were rather conservative with characteristics of local expansion. Parallel to significant price increases of oil and rapid economic development at the end of the 1970s, physical planning has been seen as an important tool for a better urban life.

In 1979 the structure plan for the capital area was completed by the consultants, and shortly after the plans for other major settlements were prepared.

The plans are approved in the Ministry of Housing, after the plan proposals have been circulated to other Ministries to solicit their views. The approval stage of the plans is rather conceptual. When the structure plans are thus approved, the detail plans are prepared. The structure plan for the capital area has been prepared on a 1/10,000 scale and the detail plans in general were prepared on a 1/2,000 scale. For the dense areas, scales of 1/1,000 and 1/500 were used.

The concepts of priorities and development stages are not very important for the capital area because almost all the basic networks are completed.

The municipalities in Oman are not responsible at any stage of physical planning and there are no public discussions of the prepared plan proposals before approval.

The citizens who have proposals for alterations or complaints about the plans apply to the Ministry of Housing with their requests. If the applications on a specific issue or area accumulate, or the issue is rather important, the Ministry of Housing solicits the views of the municipalities and other relevant Ministries.

The municipalities are responsible for the assessment and approval of the architectural drawings of the projects to be implemented within the municipal boundaries. They also give the building permits, control the construction stages and then issue residence permits.

The capital municipality which was first established in Mutrah in 1938 and reorganized in 1970 as the capital municipality, covers an area about 130 km parallel to the shore, and 40 km on land. The municipality has four regional directorates, namely greater Mutrah, Al-Hajer, Boshar and Al-Seeb. The municipality until March 1984 was administratively under the Ministry of Land Affairs and Municipalities (today's Ministry of Housing). Now, it is under the Diwan of the Royal Court. There were 3,341 people working in the capital municipality in October 1986.

C. Housing

1. Housing construction and distribution of stock

The data on the housing sector are very limited. There has never been a population and housing census conducted in Oman, and there are no statistics on building activities in private housing construction, even though the construction has to be registered with the municipalities and construction and residence permits must be issued.

The urban population of Oman is estimated to be 21.5 per cent of the total population.1/ However, this figure seems to refer to the share of the capital area population only, since the ratio of the capital area population to the total is estimated to be in the range of one fourth to one seventh. When the population of the other settlements besides the capita area is considered, the settlements should yield a much higher ratio of the population. With their exact populations unknown, the towns of Salalah, Nizwa and Sohar follow the capital area, in descending order.

The distribution of housing stock to the regions of Oman and the proportions of urban and rural housing are thus very difficult to estimate. It is an obvious fact that the housing construction activities in the capital area have been at much higher levels than the other regions; however, the population movements to the capital area and the existence of the expatriate population balance this situation in terms of occupancy ratios. The housing construction activities in towns like Salalah and Sohar are also significant.

The annual construction of housing units may be estimated from the data of the distribution of investments by sectors prepared within five year development plans. In table 19, this information is presented.

Table 19. Housing sector investments
(in current prices, RO million)

Actual 1971-1975			Actual 1976-1980			Planned 1981-1985		
Government	Private	Total	Government	Private	Total	Government	Private	Total
20.5	35.0	55.5	29.7	146.7	176.4	134.2	262.0	396.2

Source: Oman; Second Five Year Plan.

1/ Data sheets.

Taking the actual investments within the period of 1976-1980, it is observed that 16.8 per cent of the housing investments were made by the Government and the rest, 83.2 per cent by the private sector. The cost of the government housing built within this period was RO 6,660.1/ With the assumption of this cost per unit, valid for the private sector too, we can estimate that there have been around 22,000 housing units constructed in Oman within this five year period. This is an annual production of about 4,400 private housing units in all Oman.

During this plan period the total of government housing units constructed was 2,244, an annual average of about 450 units. Information on the government housing units built is presented in table 20. In the First Plan period the total annual housing production is thus estimated to be around 5,000 units in Oman.

Within the Second Plan (1981-1985) period, data on the government housing built are presented in table 21, 22, 23 and 24. There were 2,024 housing units in the regular budget of the Government completed by 1985. Construction of 815 similar units, in the plan programme, was still under way in September 1986.

As presented in table 23 and 24 there were 32 housing units constructed by the Government with financing provided from UAE. All together, it could be considered 3,160 housing units were constructed by the Government within the Second Plan period, the annual average being 632 units.

Excluding the government housing financed by the Government of the United Arab Emirates, the total investment made (including the ongoing construction) by the Government for housing during the Second Plan period amounts to RO 65,178, which is 48.8 per cent of the planned investment. This low figure may be explained by the decline of government income due to the fall in the prices of oil. It is estimated, on the other hand, that the private investments in the housing sector were more or less in line with the plan targets. The data on the loans of the Oman Housing Bank also support this assumption.

The cost per housing unit constructed by the Government in 1986 was about RO 16,000-22,0002/ and in the private sector the contractors are constructing housing at a cost of about RO 80 per square metre. If we assume an average housing unit constructed by the private sector is 150 square metres, the cost of a housing unit will be about RO 12,000. When the planned housing investment for the period of 1981-1985 (Second Plan) is divided by the assumed cost of average housing, RO 15,000 the cost of housing construction in previous years compared with 1986 was higher), it can be estimated that the private sector has built about 17,500 housing units, about 3,500 units annually. Government and private sector production add up to an annual average of about 4,100 units in the Second Plan period.

1/ Omani Ministry of Housing, data in table 20.
2/ Information from the Ministry of Housing.

It is possible to estimate the total housing production as 25,000 units in the period of the First Plan (1976-1980) and as 20,500 units in the Second Plan (1981-1985) periods.

There are no data for the distribution of the housing stock and the distribution of annual housing construction for the private sector. The information on government housing construction is presented in tables 20 to 25. In the First Plan period, 22 per cent of all government housing was built in the capital area. This percentage was about 40 per cent in the Second Plan period. In the First Plan period the majority of government housing was constructed in the eastern region with a share of 34.9 per cent. In the Second Plan period, priority was given to the capital area. Information on the distribution of government housing constructed is presented in table 25.

Table 20. The social housing units constructed during the First Five Year Plan (1976-1980)

Name of project	Region	Number of houses	Cost in RO
Al Beremi	Al Dhahira	50)	659,160
Al Beremi	Al Dhahira	50)	
Mahdha	Al Dhahira	40	346,712
Abri	Al Dhahira	84)	588,923
Tan'am	Al Dhahira	28)	
Danak	Al Dhahira	28)	315,581
Hafeet	Al Dhahira	28)	
Rawa	Capital	76	380,304
Wadi Hatat	Capital	416	2,868,027
Sohar	Al Batinah	100	866,659
Nizwa	Internal	50)	744,783
Nizwa	Internal	50)	
Khasib	Musandam	72	652,543
Daba	Musandam	60	475,721
Bakha	Musandam	48	466,357
Soor	Eastern	100	570,412
Al Mudaibi	Eastern	28	234,000
Sanao	Eastern	28	230,000
Samad Al Sha'n	Eastern	28	237,000
Masirah	Eastern	600	3,842,127
Salale	Southern	100	609,417
Taka	Southern	80	527,617
Marbat	Southern	100	619,624
Total		2,244	14,944,957

Source: Omani Ministry of Housing.

Table 21. The social housing units constructed during the Second Five Year Plan

Name of project	Region	Number of houses	Cost in RO
Al Khawd	Capital	997	27,992,845
Al Uthaiba	Capital	104	2,949,069
Al Rastak	Al Batinah	60	594,810
Bani Bo Ali	Eastern	28)	982,130
Al Ashkara	Eastern	24)	
Al Ma'Moor	Al Dhahira	20)	699,979
Al Mazim	Al Dhahira	20)	
Madha	Musandam	20)	989,081
Tebat	Musandam	24)	
Al Had	Al Batinah	24)	814,785
Al Dabaq	Al Batinah	24)	
Bani Bo Hasan	Eastern	28)	1,063,892
Falj Al Mashaikh	Eastern	24)	
Al Kamil	Eastern	28)	1,062,169
Al Wafi	Eastern	24)	
Manah	Internal	40	703,413
Al Kaboora	Al Batinah	40	825,007
Badia	Eastern	41	734,490
Saham	Al Batinah	40	900,000
Abra'	Eastern	40	779,265
Bahla	Internal	20)	844,701
Bahla Al Ma'moor	Internal	20)	
Nakhl	Al Batinah	40	765,780
Yankul	Al Dhahira	40	765,103
Al Awabi	Al Batinah	40	833,126
Mada	Eastern	18	550,000
Sadah	Eastern	26	498,000
Aswad	Al Batinah	20)	764,585
Shanas	Al Batinah	24)	
Adam	Internal	40	690,843
Al Sanina	Al Dhahira	24)	796,322
Al Fayadh	Al Dhahira	18)	
Al Khutwa	Al Dhahira	20)	842,553
Al Jawef	Al Dhahira	24)	
Total		2,024[c/]	48,471,953

Source: Omani Ministry of Housing.

a/ The sum of the units is actually 1988

Table 22. Projects of the Second Five Year Plan (1981-1985) and units still under construction

Name of project	Region	Number of houses	Cost in RO	Construction period from	Construction period to	Remarks
Anit	Capital	70	1,638,315	10/1982	1/1984	Construction in the final stage
Tamreat	Southern	60	1,216,000	6/1984	6/1985	The project is in the final stage
Salale	Southern	100	2,702,000	5/1984	8/1985	Construction under way
Wadi Al Ma'awel	Al Batinah	40	700,000	1/1985	1/1986	The contractor is late
Al Suewek	Al Batinah	40	730,000	3/1985	3/1986	The contractor is late
Al Kabil	Eastern	40	730,000	2/1985	2/1986	Construction under way
Athka	Internal	40	700,000	2/1985	2/1986	Construction under way
Soor	Eastern	25		--	--	Construction under way
			660,000			
Ra's Al Had	Eastern	25		--	--	Construction under way
Al Masna'a	Al Batinah	40	750,000	3/1985	3/1986	Construction under way
Barka'	Al Batinah	40	730,000	4/1985	4/1986	Construction under way
Karyat	Capital	40	750,000	2/1985	2/1986	Construction under way
Sama'il	Internal	39	700,000	7/1985	7/1986	Construction under way
Al Hamra and AZ	Internal	60	1,000,000	9/1985	9/1986	Construction under way
Fanja' and Badbad	Internal	60	1,000,000	9/1985	9/1986	Contract is being prepared
Nazwa	Internal	38	700,000	6/1985	6/1986	Construction under way
Al Safa	Al Dhahira	15	886,910	3/1985	3/1986	The project is in the final stage
Walmasrook	Al Dhahira	35		--	--	The project is in the final stage
Makinat Shahn	Southern	50	750,000	11/1985	9/1986	Foundations are under construction
Makshan	Southern	30	600,000	5/1985	3/1986	Construction under way
Total		887	16,943,225			

Source: Omani Ministry of Housing.

Table 23. Houses constructed not included in the Second Five Year Plan (1981-1985)

Project name	Region	Number of houses	Remarks
Al Fay	Al Dhahira	60	These houses were constructed
Al Hadif	Al Dhahira	61	at the expense of the Sheikh Rashid Bin Maktoom, the Governor of Dubai

Source: Omani Ministry of Housing.

Table 24. Houses planned for construction though not included in the Second Five Year Plan (1981-1985)*

Project name	Region	Number of houses	Remarks
Nazwa	Internal	50	Preliminary designs had been approved.
Bahla	Internal	50	Preliminary designs had been approved.
Jabrean	Internal	100	Preliminary designs are under way.

Source: Omani Ministry of Housing.

* These houses are at the expense of the Sheikh Maktoom Bin Rashid, the Crown Prince of Dubai. Their estimated cost is RO 6.5 million.

Table 25. Regional distribution of government social housing units constructed in the First (1976-1980) and Second (1981-1985) Plan periods

Regions	First Plan period	percentage	Second Plan period A	B	C	Percentage for C
Capital	492	21.9	1,101	110	1,211	40.0
Batinah	100	4.5	272	160	432	14.2
Dhahira	308	13.7	166	50	337*	11.1
Internal	100	4.5	120	237	357	11.8
Musandam	180	8.0	48	–	48	1.7
Eastern	784	34.9	281	90	371	12.0
Southern	280	12.5	–	240	240	7.9
Total	2,244	100.0	2,024	887	3,032	100.0

Source: Omani Ministry of Housing.

A. Construction completed.
B. Construction ongoing.
C. Total (also includes housing units in table 23, in the region of Dhahira).

2. Housing production modes and tenure

The majority of all the housing in Oman, including the rural areas, is constructed by specialized labour. A very small share may be estimated as completed by self-help techniques. These units usually are in the rural locations.

Government housing construction is carried out by specialized contractors. The construction process starts first with the identification of the location. After the research and surveying activities and assessment of actual needs of the region, the locations and amounts of housing units to be constructed are fixed and programmes are prepared by the Ministry of Housing. These programmes are arranged for five year periods and annually. These programme proposals are submitted to the Development Council and Ministry of Economy and Finance. When these programmes are approved and become official, the Ministry of Housing, through the General Directorate of Housing, prepares preliminary project documents for each selected location. These projects then are tendered to consultant companies for further development of design and preparation of the implementation project drawings.

The Ministry of Housing always uses national consultant companies for these activities. When the project documents are ready with cost estimates and all other essential items, the projects are handed to the Tender Board

Council. The Tender Board is comprised of members from the Government and specialized officials, and headed by the representative of the Sultan of Oman. When the final decision is made on the contracts, the Minister of Housing and the contractor sign the contract and work starts. For the construction of government housing only Omani companies are eligible. The foreign companies cannot enter the tenders. The construction works progress under the consultancy of the assigned consultancy company. The Ministry controls all the stages of construction through the Directorate General of Housing. Statements prepared by the contractor company as the work proceeds are approved by the Ministry of Housing and payments are made by the Ministry of Economy and Finance.

The land where the government housing units were constructed until now belongs to the Government. During selection of location, availability of government-owned land is considered an important factor. However, if there is no land available, it is possible to buy or expropriate plots from private owners.

The government housing projects are constructed with tenders of about 200 units as the average size contract.

The largest project, implemented in the capital region, was 1,000 units. The smallest number of units in the tenders was about 20.

After the construction stage of the government housing projects, public anouncements are made to receive the applications for the units. Families (the household heads) whose monthly incomes are less than RO 200, and who have no housing or appropriate residential plots are eligible. The applicants have to certify that they are eligible under the conditions by bringing official statements from the relevant government offices. When all the applications are received, an evaluation for the distribution of units is made by the committee established by the Ministry of Housing, chaired by the Governor of the area. If the number of housing units is less than the number of entitled applicants, a lottery among the applicants is held.

The cost of the housing unit is to be paid back in 30 years in regular monthly instalments, interest free. The cost of the unit is calculated as the actual money spent for the construction of the unit and its compound walls. The land, general infrastructure and connections are not included in the calculation of the cost for the housing unit. About 80 per cent of the housing constructed in this way, were, however; granted without any payments. The occupants are not entitled to sell or exchange their premises.

Besides the Ministry of Housing, which is constructing public housing, some other Ministries and governmental organizations are constructing or renting housing for their employees. The capital municipality has also constructed some low cost housing units.

The Royal Oman Police, which is an independent organization (not under the Ministry of Interior) has constructed about 3,000-4,000 housing units distributed over all of Oman. These housing units are allocated to police families without any rent. The Ministry of Defence and Army have also constructed similar housing projects. The number of housing units belonging to the Army and Ministry of Defence is higher than the number of housing units belonging to the Royal Oman Police. The housing units designed for the Omani families are with gardens, whereas the ones built for the expatriates are sometimes flats in blocks. Six-storey height is the maximum height in such residential blocks.

The Ministries which have no, or limited, technical capacity to construct their own housing projects have been delegating their work to the Ministry of Housing. However, in recent years, owing to an excess number of housing units, especially in the capital area, the Ministries are choosing to give rental subsidies or rental units to their employees instead of constructing new units.

In private housing construction activities, contractors are extensively used. The contractors usually charge a cost per square metre of construction for an agreed specification between them and the owner of the projects. There are local contractors for housing construction in all the regions of Oman. The local contractors have the advantage of reducing the construction cost in their own regions. A good reputation in the region and face-to-face relations with the customers also give an advantage to the local contractors in housing construction.

Almost all Omani families own their own houses. Some families may own houses in their original provinces and live in the capital area in rental housing. Except for the capital area, until recently house rentals were not very common and usually the tenants were expatriates. However, recently in conjunction with the construction of new units, renting of housing units is becoming more widespread. In the capital area the rental housing stock is generally utilized by the expatriates and the government employees. The number of vacant housing units in both the capital area and in the other regions is still very low, despite the construction boom in recent years. The basic reason is the move of the newly wed couple who were previously living with their parents to the new units. This process takes place sometimes even without new families. For example, when the construction of the new housing unit belonging to the family (to the parents) is completed, the oldest son of the family starts to live there.

In the capital area, however, there are a significant number of vacancies in the recently constructed residential blocks. The lack of attraction of an apartment life-style for Omani families and the stagnation in the increase of the number of expatriates seem to perpetuate this situation.

The rents are quite low in the regions outside of the capital area. In the capital area also, however, rents have started to decline. The rent of a decent family house in the capital area may be between RO 100-500 monthly, depending on the quality and location of the premises. It is not very common to rent housing units with furniture. In the capital area it is possible to find furnished housing rentals. They are usually quite expensive and choice is limited.

3. Utilities and physical quality of the housing stock

There are almost no data on the physical quality and the utility situation of the housing stock. According to a housing survey conducted in 1981, for the capital area, there were 26,176 units housing 191,000 people. In addition there were about 35,000 workers living in permanent and temporary barracks of varying quality. Of total housing units 25.2 per cent were flats, 24.4 per cent modern houses and 31.7 per cent were traditional houses. Of total housing stock, 18.7 per cent was comprised of lower quality dwellings, constructed with not very durable materials. Data on the type of housing units in the capital area are presented in table 26.

Size of urban housing units in general varies between 100 and 200 square metres in Oman. There are generally three bedrooms in the privately constructed housing units. The majority of the low-cost government housing units have two-bedrooms. Until 1984, the low-lost government houses were built with only one- or two-bedroom. In 1984 three-bedroom housing units were also constructed. The total number of low-cost housing constructed until the end of 1984 was 3,871 units, of which 1,340, (34.6 per cent) were one-bedroom, 2,433, (62.9 per cent) two-bedroom and 98 (2.5 per cent) three-bedroom. Information on the location and type of low-cost government housing constructed until the end of 1984 is presented in table 27. The recent housing projects implemented by the Ministry of Housing cover an area of about 170 square metres per unit, with three bedrooms, two bathrooms, one living room and one multipurpose room and a kitchen. The buildings are one-storey type with a reinforced concrete frame, giving the possibility for the occupants to construct a second floor at a later stage.

Table 26. Types of housing in the capital area (1981)

	Flats	Modern houses	Traditional houses	Sandakas and Barasti	Total
Eastern capital	5,393	2,359	5,420	1,760	14,932
Qurm area	912	2,270	711	272	4,165
Adheiba area	74	416	463	1,286	2,239
Airport area	127	256	13	35	413
Seeb area	96	522	1,572	1,203	3,393
Other	2	579	106	329	1,016
Total	6,604	6,402	8,285	4,885	26,176

Source: Omani Ministry of Housing.

The housing projects of the Ministry are all designed to have a few shops (depending on the number of housing units) and a mosque. With larger projects, neighbourhood centre facilities are also added. All the units constructed by the Ministry have electricity and water networks. The water is provided either by connection to the city networks, where the locations of the projects are integrated with the already serviced areas, or by water tankers. Each housing unit is equipped with a water storage tank. The sewerage problem is usually solved with septic tanks.

In the capital area all the housing units have electricity, and 70 per cent of the total housing units are connected to piped water. The price of electricity all over Oman is 20 biazas per kW. In the capital area, running water costs two biazas per gallon. In the areas where water is distributed by tankers, the price of water is about 5 biazas per gallon. In the Sohar Governorate, for example, the private tankers buy 600 gallons of water for RO 1.2 and sell it for RO 3 to households. The monthly water cost of a house with garden and with 7-8 inhabitants is about RO 15-20 in the capital area.

Cost of electricity for households is heavy, given the extensive use of air-conditioners almost all through the year. Unfortunately, the public authorities are not able to prevent free usage (at least partially) of electricity in illegal ways.

About 5 per cent of total housing in the capital area may be considered as connected to sewerage system. The sewerage system is mostly in the central business district of Ruwi and Mutrah. In Darsayt there is a sewerage treatment plant and sewerage dumping by tankers is carried out at the Al-Ansab location which is at quite a distance from the sea. A sort of natural filtration and treatment process is provided with different level pools in the Al-Ansab plant. There are about 200 tankers daily dumping sewerage at this plant. Sewerage collection by tankers and solid waste collection are free of charge and operated by the municipality. A second treatment plant is projected to be constructed in the western part of the capital area at Ghala location.

The majority of housing in Oman is constructed with concrete blocks. These blocks are produced in many locations by many manufacturers. A small share of the housing is built with bricks. Such housing is more costly and use of bricks for construction is more prestigious. In the capital area there are only two brick manufacturing plants. Outside of the capital area the number of housing units constructed with bricks is very limited. There are two types of concrete blocks, hollow and solid, used in the construction of housing. There is limited information on the density of occupation in Oman. According to the study conducted for the capital area in 1981, there were about 7.3 persons per housing unit in the capital area. In the eastern parts of the capital area this figure was higher, about 8.1 persons per housing unit. This crowding was caused by, first, the size of the families and secondly by the fact that two (sometimes even more) households, (the parents and the newly married sons or daughters) live together.

It is estimated, however, that parallel to the large increase in housing construction, especially in the capital area in the past few years, the number

Table 27. Low-cost houses completed

	Up to 1980		During 1981		During 1982		During 1983		During 1984			Total up to the end of 1984				
	One bed-room	Two bed-rooms	One bed-room	Two bed-rooms	One bed-room	Two bed-rooms	One bed-room	Two bed-rooms	One bed-room	Two bed-rooms	Three bed-rooms	One bed-room	Two bed-rooms	Three bed-rooms	Total	Total cost in thousand rials Omani
Capital area	–	492	–	–	–	–	–	–	–	1,003	98	–	1,495	98	1,593	34,191.1
Nizwa	–	100	–	–	–	–	–	–	–	–	–	–	100	–	100	744.8
Al-Buraimi	–	100	–	–	–	–	–	42	–	–	–	–	142	–	142	1,485.0
Sohar	–	100	–	–	–	–	–	–	–	–	–	–	100	–	100	586.7
Daba	–	60	–	–	–	–	–	–	–	–	–	–	60	–	60	475.7
Muhdah	–	40	–	–	–	–	–	44	–	–	–	–	84	–	84	1,317.8
Khasab	-	72	–	–	–	–	–	–	–	–	–	–	72	–	72	642.5
Sure	100	–	–	–	–	–	–	–	–	–	–	100	–	–	100	570.4
Salalah	100	–	–	–	–	–	–	–	–	–	–	100	–	–	100	609.4
Masirah	600	–	–	–	–	–	–	–	–	–	–	600	–	–	600	3,842.1
Ibri and Tan'am	112	–	–	–	–	–	–	–	–			112	–	–	112	588.9
Dhank	28	–	–	–	–	–	–	–	–			28	–	–	28	157.8
Hafit	28	–	–	–	–	–	–	–	–			28	–	–	28	157.8
Al-Mudaibi	–	–	28	–	–	–	–	–	–	–	–	28	–	–	28	234.0
Samad-Alshan	–	–	28	–	–	–	–	–	–	–	–	28	–	–	28	237.0
Sinaw	–	–	28	–	–	–	–	–	–	–	–	28	–	–	28	230.0
Taqa	80	–	–	–	–	–	–	–	–	–	–	80	–	–	80	527.6
Marabat	100	–	–	–	–	–	–	–	–	–	–	100	–	–	100	619.6
Bukah	–	–	48	–	–	–	–	–	–	–	–	48	–	–	48	466.4
Rostaq	–	–	–	–	60	–	–	–	–	–	–	60	–	–	60	594.8
Shinas	–	–	–	–	–	24	–	–	–	–	–	–	24	–	24	
Aswad	–	–	–	–	–	24	–	–	–	–	–	–	24	–	24	807.0
Liwa	–	–	–	–	–	–	–	48	–	–	–	–	48	–	48	842.8
Tebat	–	–	–	–	–	–	–	24	–	–	–	–	24	–	24	613.4
Madha	–	–	–	–	–	–	–	20	–	–	–	–	20	–	20	394.4
Jaalan Bani By Ali	–	–	–	–	–	–	–	52	–	–	–	–	52	–	52	1,049.6
Jaalan Bani By Hassan	–	–	–	–	–	–	–	52	–	–	–		52	–	52	1,063.9
Al Kamil and Al-Wafi	–	–	–	–	–	–	–	56	–	–	–	–	56	–	56	1,062.2
Adam	–	–	–	–	–	–	–	40	–	–	–	–	40	–	40	690.8
Al Mazem	–	–	–	–	–	–	–	20	–	–	–	–	20	–	20	
Al Mamor	–	–	–	–	–	–	–	20	–	–	–	–	20	–	20	
Total	1,148	964	132	–	60	48	–	418	–	1,003	98	1,340	2,433	98	3,871	55,626.9

Source: Statistical Year Book, 1985.

Note: In addition to 121 housing units in the Musandam Governorate financed by the United Arab Emirates and 76 houses built before the First Five Year Plan.

of persons per house has decreased. Outside the capital area it is very difficult even to estimate the average number of persons per housing unit, since the housing units are used more extensively at certain periods (e.g. at weekends) and less during other times.

4. Cost of housing

Although there is detailed information on the cost of government-constructed low cost housing in Oman, information on the costs of private housing construction is very limited.

The cost calculation of housing is generally based on the costs of land, construction materials, labour and organization issues. In the government sector, the costs of land and infrastructure are not included within the calculations of the costs per unit. Such costs are charged to the general operational costs of the Ministry of Housing.

During the implementation of the first Five Year Plan the average cost of government housing was around RO 6,660. The costs were different in the different regions. With quality and area of the housing units unknown, a comparison of average costs for the regions is not very meaningful. Keeping this important factor in mind, one can suggest that the least costly construction is in the Dhahira region, and the most expensive in the Musandam region.

During the Second Five Year Plan, with the housing units completed, the average cost per unit was RD 23,948. The most expensive units were constructed in the capital area and the least costly ones were constructed in the internal region. The capital area low-cost housing units were about 50 per cent more expensive than the average unit cost for the internal region. It may be estimated that the type of housing constructed in the capital area was of higher quality and larger than the others.

Under the Second Five Year Plan (but still not completed by 1986), the most expensive housing units were in the southern region. The capital area average unit cost was very close to the average unit cost of the southern region. The least costly ones were in the eastern region. The difference between the least and the highest was about 42 per cent more than the least average unit cost.

When the average cost of housing units constructed in the First and Second Plan periods is compared with that of construction under way, a very substantive increase can be observed between the two plan periods. The units constructed within the Second Plan period were about 3.5 times more costly than the units constructed previously. This may be partly due to implementation of more costly projects and partly to the significant price increases in the late 1970s. In the mid-1980s the prices of construction materials and all costs in construction activities in general declined. With regard to the most recent tenders of housing projects of the Ministry of Housing (the housing projects still ongoing) a decline in costs averaging about 20 per cent has been observed.

The average costs of government-constructed housing units according to regions and plan periods are presented in table 28.

Table 28. Average costs of government-constructed housing units according to regions and plan periods (First 1976-1980, Second 1981-1985)

Regions	Costs per unit (RO) 1. Plan	2. Plan	2. Plan	(still under construction)
Capital	6,602	28,103	21,712	
Batinah	8,667	20,213	18,188	
Dhahira	6,202	18,699	17,738	
Internal	7,448	18,658	17,300	
Musandam	8,804	20,606	--	
Eastern	6,522	20,178	15,444	
Southern	6,273	--	21,950	
Average for all regions	6,660	23,948	1,902	

Source: Oman, Ministry of Housing.

Costs in private housing construction have been lower than the government housing programmes. Cost of contractors per square metre of housing has been around RO 100 until very recently. Owing to the decline in the volume of construction activities and prices in general, and more important owing to the decline in demand for housing construction, contractors reduced for housing construction, contractors reduced their prices to as low as RO 70-75 per square metre in mid-1986. Units built according to plans and specifications of the government housing programmes, which provided 170 square metres per unit, would cost about RO 13,000 each, if constructed by the private sector in 1986.

5. Housing finance

(a) Private financing

Housing finance in Oman may be divided into two categories, private savings and sources, and housing loans through the public sector and some institutions.

Private financing of housing in Oman is no different from that of other countries in the region. Housing investments are seen as security for the future and Omani families give utmost priority to owing the house they live in. In the urban centres, especially in the capital area, ownership of housing is also considered an income-yielding investment.

The housing investments in the private sector are usually made by individual homeowners whose financial means are limited to construction of town houses or groups of town houses rather than large-scale complexes. Small amounts of private capital cannot be amassed in Oman to construct corporate housing, as in some countries of the region, where condominium ownership is possible, and the developers are using the buyers' money in the early stages of construction. A limited number of developers, however, with rather large amounts of capital, are constructing and selling housing units to relatively high income groups.

The possibility of condominium ownership in Oman may foster construction of residential blocks in the future when the demand for such housing may be higher than at present.

(b) Oman Housing Bank

The Oman Housing Bank is the basic public institution for housing finance. The Bank was established in 1974 and its current capital is RO 30 million. (It was 20 million and increased in July 1986). The Bank is incorporated as an Omani joint stock company and 60.9 per cent of the shares of the Bank belong to the Government of Oman, 39.0 per cent to the Ministry of Finance of the Kuwaiti Government and 0.1 per cent to the Oman Development Bank.

The Oman Housing Bank is administered by a board of directors chaired by the Omani Minister of Housing. The deputy chairman is the representative of the Ministry of Finance of the Kuwaiti Government. The principal activity of the Bank is to provide loans to Omani citizens for the purpose of construction, purchase, additions and completion of residential property in the Sultanate of Oman. The Bank policy is to support lower income groups. This policy is implemented by giving priority to lower income groups and secondly by charging lower interest rates. The Bank charges 10 per cent interest per annum in all its loans and the actual difference between that and what the customers pay (a lower interest rate) is subsidized by the Government. The conditions for housing loans to different income groups are presented in table 29.

Table 29. Loan conditions of the Oman Housing Bank

Monthly income category RO	Percentage interest rate	Years for period of repayment
Up to 200	2	20
201-400	3	20
401-600	4	15
601-800	6	15
801-1,000	8	15
1,000 +	9	15

Source: Oman Housing Bank.

Loans made by the Bank to different income groups in the years 1983-1985 are presented in table 30. In 1985, there were 737 loans made with a total amount of RO 12,450,640. The average loan was RO 16,894. The maximum loan amount approved by the Bank is currently RO 35,000.

The Bank loans, as can be seen in table 30, are most common in the monthly income category of RO 201-400 of all the loans in 1985, 46 per cent were made to this income group. As income increases, the amount of the loan increases. The highest average loans were in the income group of RO 801-1,000.

The Oman Housing Bank has six branches in different governorates, besides the main branch in the capital. As the new branches are established the loan applications and loan procedures are done locally, and the work of the main branch (which previously covered all Oman) is distributed to the local branches. Until 30 September 1986, however, 63.8 per cent of all loans made by the Oman Housing Bank were given through the main branch. The Salalah Branch, even though established quite recently, in 1980, has been very active and 21.2 per cent of all the loan transactions have taken place in this branch. The distribution of housing loans in the branches of the Oman Housing Bank is presented in table 31.

The total amount of housing loans made by the Bank was RO 129 million by the end of September 1986. These loans made possible the construction of 9,734 housing units.

The applicants for bank loans must provide all necessary documents such as certificate of employment, monthly wage and family information. If the applicant has a house in habitable conditions, he is not eligible for loans from the Oman Housing Bank. If the applicant is found eligible for a loan at the first stage of investigation, he is asked to bring the information for the house he intends to buy. The approved drawings, construction permit, deed to the land, registration form of the contractor and other such documents are required from the applicant if the house is still under construction. When a loan is granted for an uncompleted housing unit, the payments (the loan) are made to the contractor of the housing construction, according to the level of work undertaken. If the house is completed (loans can be made for already inhabited houses when bought by applicants) documents such as, sales agreement, title and completion certificate from the municipality are required. The cost of the house may be higher than the limit of the loan; the difference has to be paid by the applicant.

When a completed house is bought through a loan from the Bank at least 5 per cent of the price of the house must be paid by the applicant. The applicants are eligible for housing loans only once. For example, if a person had a housing loan from the institution where he works, he is not eligible for housing bank loans any more. The applicants have to make their loan agreements with the Bank in a way that all the loan is paid back before the applicant is 65 years old. At the time of the loan agreement, insurance is also compulsory, to guarantee the repayment of the loan. In case of death, inability to pay or disappearance of the debtor, the insurance takes over the repayment of the loan to the Bank, and the family of the debtor will not have any problems in retaining ownership of the house.

(c) Other institutions giving housing loans

Besides the Oman Housing Bank, which makes housing loans to all eligible Omani citizens, there are some organizations in Oman which make

Table 30. Loans approved during the period 1983-1985

Monthly income	1983		1984		1985				
	No.	Amount	No.	Amount	No.	%	Amount	%	Average loans RO
Up to 200	119	867,500	107	771,300	157	21.3	1,492,630	12.0	9,507
201-400	319	4,055,400	322	3,866,783	339	46.0	5,252,783	42.2	15,495
401-600	227	4,452,400	181	3,521,650	163	22.1	3,658,100	29.4	22,442
601-800	96	1,980,200	75	1,703,800	63	8.5	1,616,400	13.0	25,657
801-1,000	13	321,300	12	298,700	7	0.9	213,700	1.7	30,529
More than 1,000	10	241,200	8	183,700	8	1.0	217,027	1.7	27,128
Total	784	12,018,000	705	10,345,800	737	100.0	12,450,640	100.0	16,894

Source: Oman Housing Bank.

Table 31. Loans approved by bank branches since inception up to 30 September 1986

Branch	No.	Percentage	Amount	Percentage
Main	6,157	63.2	82,245,733	63.8
Salalah	2,051	21.1	27,400,447	21.2
Sohar	603	6.2	7,319,872	5.7
Sure	616	6.3	7,956,836	6.2
Nizwa	254	2.6	3,379,200	2.6
Khasab	47	0.5	598,600	0.4
Buraimi	6	0.1	96,400	0.1
Total	9,734	100.0	128,997,088	100.0

Source: Oman Housing Bank.

Note:
- Main Branch was established in 1979
- Salalah Branch was established in 1980
- Sohar Branch was established in 1979
- Sur Branch was established in 1979
- Nizwa Branch was established in 1981
- Khasab Branch was established in 1984
- Buraimi Branch was established in 1986

housing loans to their employees. The Petroleum Development Company, the Port Services Corporation, Gulf Air, the Central Bank of Oman, the Royal Oman Police and the Ministry of Defence are the basic such organizations. The loans made by these organizations are usually interest free. The amount of the loan usually is calculated according to the income level of the applicant, and the loan is paid back by deductions from the applicant's salary. The highest deduction rate may be 25 per cent of the basic salary without including other allowances. The loan is usually expected to be paid back in 20 years. This period is 25 years for the loans of the Port Services Corporation. Applicants intending to utilize these housing loans are generally provided with land from the Ministry of Housing, or they are buying already completed units. Ten per cent of the loan may be allocated for the cost of the land.

The Port Services Corporation and the Central Bank of Oman are giving housing loans to their employees through the Oman Housing Bank. The Oman Housing Bank carries out this task according to its own procedures. The other organizations, however, have developed their own procedures.

6. Housing need

In Oman, future housing needs seem to be in the urban areas. The housing problem in the rural areas, in parallel to the shift of population to urban centres, will not be a quantitative rather a qualitative issue. The basic need will be to increase the comfort and utility levels of the existing housing stock in the rural areas, with some new construction to replace deteriorated units, with settlements in new locations.

Urban housing needs on the other hand will include both improvement of the present housing stock and construction of new units for the new urban households. There are very limited data for the estimate of the present household size in urban areas. According to a survey in 11 towns (1977-1979), the median household size was 5.8 persons. Without any estimation of figures, it is also a generally accepted fact that, on the average, there is currently more than one household per housing unit. In the capital area, for example, according to a survey made by the consultant firm for planning, there were 7.3 persons per housing unit in 1981. In the denser areas like the eastern capital, this figure was as high as 8.1 persons. This means there were 1.26 and 1.40 households per housing unit, respectively (with the household size accepted as 5.8 persons on average).

The planning studies for the capital area accepted 6.5 persons per housing unit as a target for the 10 year housing production programme. The housing need in the capital area has been calculated on the basis of replacement of the low quality sandaka units (similar to squatters' settlements), production of new units to reduce current overcrowding from 7.3 to 6.5 persons/unit, and new units for the population increase in 1981-1990.

In table 32 estimated housing needs for the capital area are presented.

Table 32. Estimated housing need for the capital area (1981-1990)

Replacement of sandaka family units	4,900 units
Replacement for town planning clearance -20 per cent of traditional units	1,700
New units to reduce overcrowding from 7.3 to 6.5 persons/unit	3,200
New units for population growth 1981-1985	12,800
New units for population growth 1985-1990	19,700
Estimated 10 year requirements	42,300 units

Source: Omani Ministry of Housing.

New construction in the capital area in recent years has favoured the construction of flats, more than half of the total. Long-term needs will require a greater proportion of one and two-family units to be constructed for the needs of the increasing number of Omani households. The Ministry of Housing has prepared a programme for the types of housing to be constructed, with three categories, namely private sector housing to be constructed for rental, housing for owner occupation and government housing. According to this programme, 74 per cent of the new housing construction in the capital area for the 10 year period, will be houses and the remaining 26 per cent will be flats.

It is seen as vitally important by the Ministry of Housing, especially for the private sector housing production, that suitable plots to prepared and distributed well in advance, with some surplus to allow for delays in design, financing and contracting on individual projects. Past experience, when land preparation was behind the demand for residential construction, causing a shortage of housing units (not flats) led the Ministry of Housing to take necessary measures for a sufficient supply of plots. By 1982 there was a ready stock of land zoned for 17,700 flats and 37,800 housing units in the capital area. Detailed information on the plots is presented in table 34.

Table 33. Ten year programme for the type of housing units to be constructed in the capital area

	Flats	Houses
Through private speculative (rental) development on previously owned, or distributed land, including re-building to higher densities in traditional areas	600	300
Through private development of owner-occupied single or two-family housing on distributed land, supported by government housing loan programme		1,400
Through government construction programmes, including Ministry of Housing New Communities Programme, low-cost housing, and other government programmes	500	1,400
Recommended number of housing units to be constructed annually	1,100	3,100
Ten year programme	11,000	31,000

Source: Omani Ministry of Housing.

Table 34. Land for residential development in the capital area

	Zoned flat units	Zoned housing units
Government land distributed or ready for distribution, include. central business district, Khwair, Al Khod, Wadi Khabir and infill: 7,300 plots	5,700	6,800
Government land in preparation for distribution or development by MOLAM New Communities Programme and MOSAL low cost housing: 13,300 plots	5,000	17,000
Government land identified for future planning and development, include. Mabila South, Ghala and Boshar Heights, Medinat AL Nahda extensions, Adheibe Central Commercial Zone (flats), Infill: 8,600 plots	2,000	12,000
Historically private land currently in substandard traditional development reasoned after town planning improvements: Est. 3,000 plots	5,000	2,000
Total	17,700	37,800

It is essential to have more precise data on population issues and present housing stock to be able to estimate future housing needs more accurately. The completion of a population and housing census will be a very substantive step for all the relevant studies in Oman.

7. Housing policies and projects

The housing sector until recently was supervised by the Ministry of Social Affairs and Labour with respect to low-cost housing. The Ministry of Land Affairs and Municipalities, was responsible for zoning and issuing building permits besides distribution of land. According to the recent reorganization, the Ministry of Land Affairs and Municipalities became the Ministry of Housing. The units related to housing issues in the Ministry of Social Affairs and Labour also were joined to the new structure of the Ministry of Housing. Now the Ministry of Housing, also the supervisor of the Oman Housing Bank, is the main governmental body responsible for housing issues at all levels.

The Second Five Year Plan summarized the policies and targets in the housing sector as follows:[1/]

1. To continue to sell Government land to eligible citizens after completing its zoning according to town plans;

2. To leave investment in housing to the private sector, except for the low-cost housing programmes;

3. To increase the resources available to the Oman Housing Bank for lending to the citizens;

4. To expand substantially the programmes of low-cost housing, with special emphasis on the Wilayats (i.e. the governorates other than the capital area);

5. To utilize the low cost housing programmes in improving the outlook of various towns and villages through the careful choice of architectural designs which are commensurate with this objective.

6. To use part of the funds allocated for low cost housing for urban development of various towns and villages by extending assistance to owners of existing houses for the purpose of improving those houses;

7. To use part of the funds allocated for low cost housing to provide substitute houses for those whose houses are affected by public projects such as roads.

In the implementation period of the plan (1981-1985) these targets were achieved reasonably well within the limitations of the fluctuating economic and financial situation. However, the policy of dispersing the low cost housing production to locations other than the capital area was not fulfilled. On the contrary, the share of low cost housing constructed in the capital area almost doubled, and became 40 per cent of the total low cost housing construction in the Second Plan period. The first and the third targets may be considered as completely fulfilled, since the current amount of plots prepared by the Ministry of Housing is more than the actual demand for construction and all the applicants to the Oman Housing Bank are quickly supplied with housing loans.

The coming five year plan is expected to formulate policies for the better utilization of the present housing stock and improvement of the substandard housing units. There may be more incentives for the development of settlements and economic activities in locations other than the Capital area. The housing policy of the Third five Year Plan, however, is estimated to carry on the main streams of the Second Five Year Plan, which was in general successfully implemented.

A list of the important government projects in the housing sector for the period of the Second Five Year Plan is presented in annex XV.

1/ Oman, Second Five Year Plan, p. 111.

D. Infrastructure

1. Water supply and sewerage

Although the southern part of Oman is swept by monsoon rains each year, the capital area receives only about 90 mm of rainfall annually. This small amount of precipitation comes in sudden, torrential downpours and evaporates or runs off into the sea as quickly as it comes. To hold this water until it has time to seep into the ground and replenish underground sources, the Government is building a series of dams throughout the country. When these recharge dams are completed, it is expected that ground-water resources will be substantially increased, permitting more crops to be cultivated and more water to be supplied to urban centres.

Surface water resources of Oman are negligible. Ground water is one of the main natural resources in Oman and its availability is in general a limiting factor. Ground water in Oman is derived either from deep fossil aquifers extending over large portions of the Arabian Peninsula or from recent wadi deposits, alluvial fans and coastal plains along the mountain ranges. Owing to the cost of water production from such deep aquifers, most extraction has taken place in the shallow aquifers. Main aquifers in Oman, are in the northern coastal plain, in the interior plains and in the Dhofar-Salalah plain.1/

The main problems affecting resources and applied solutions in Oman are as follows:

(a) Saline sea water intrusion: this phenomenon is monitored in several places and countered by moving the extraction zone back from the coast;

(b) Net surface flow losses to the sea or the desert, which may be reduced by increasing recharge schemes;

(c) Inefficient use of water, which will improve with introduction of water-saving techniques and practices.

The main source of water supply for rural uses and agriculture is still the traditional falal system. The 4,000 aflaaj (plural of falaj) at present in use are constantly being repaired and upgraded. During the first four years of the Second Five Year Plan (1981-1985) about 900 aflaaj and 3,200 wells were repaired and maintained by the Government.2/

1/ United Nations Economic and Social Commission for Western Asia, Development of Guidelines for the Economic Use of Water in the ESCWA Region, (E/ESCWA/NR/85/19), 1986, p. 54.

2/ Oman, 185, p. 74.

The sources for domestic water supply are ground water or desalinated water. The ground water is extracted mainly from hand-dug wells, boreholes and falaj systems. In mountainous areas spring discharges are also sometimes used.

The water supply system for the capital area has been expanded continuously since 1974. In addition to the distribution network (pipes), organized tanker services with tanker discharge points cover the suburbs, where shallow wells are generally used. Ground water is not treated, but disinfected.

The production of water in the capital area increased from 156.0 million gallons in 1970 to 4,333.1 million gallons in 1984. Consumption also increased from 9.0 million gallons to 3,051.4 million gallons in the same period. The production and consumption of water in the capital area show different level capacities at different periods of the year. Maximum production and consumption in 1984 took place in July, with 445.0 million gallons and 328.1 million gallons respectively.

Minimum production was in May of the same year, whereas minimum consumption was in March. The information on the monthly production and consumption of water in the capital area is presented in annex XVII.

In 1984, 82 per cent of the water produced in the capital area was from the desalination plant in Al-Qhubra. The remaining 18 per cent was provided from wells. The water connections in the capital area were limited to only 456 in 1970. The number of connections increased substantively after then, and in 1984 it reached 27,900. Information on the production and consumption of water in the capital area and Salalah region is presented in tables 35 and 36.

In 1986, however, it was noted by the relevant officials that the demand for water was increasing more than the production capacity increases, a situation which could lead to bottle-necks in the future. In the coming Five Year Plan a new desalination plant is programmed to be constructed at Barkah on the Sohar road, about 85 km from the capital area. The level of production and consumption of water in the capital area has reached daily levels of 23 million gallons (at desalination plant alone) and 22 million gallons respectively.[1/]

The per capita water requirements for the capital have been estimated to vary between 80-300 litres a day depending on income-level areas, with an average figure of 200 L/C/D. For the provincial towns in northern Oman the domestic water demand has been estimated as in table 37.

1/ Information from the Ministry of Electricity and Water.

Table 35. **Water statistics relating to the capital area and the Salalah governorate supply**

Item	Unit	Water department	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Quantity of water produced	Million gallons	Capital area	156.0	310.0	310.0	440.4	296.7	358.5	429.8	1,002.0	1,265.3	1,746.0	2,458.7	2,976.2	3,556.6	4,280.3	4,333.1
		Wells	(156.0)	(310.0)	(310.0)	(440.4)	(296.7)	(358.5)	(429.8)	(316.7)	(237.7)	(1295.8)	(1011.4)	(1482.8)	(1846.8)	(1156.0)	(775.4)
		Desali-nation	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(685.3)	(1027.6)	(450.2)	(1447.3)	(1493.4)	(1,709.8)	(3124.3)	(3557.7)
		Southern region	N.A.	N.A.	N.A.	111.4	244.5	N.A.	N.A.	439.9	479.4	462.0	542.5	614.8	933.5	1013.3	1349.3
Quantity of water consumed	Million gallons	Capital area	9.0	63.0	143.7	184.4	222.2	286.8	356.8	892.6	1127.3	1360.8	1532.3	1881.3	2601.3	2940.0	3051.4
		Southern region	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	439.9	479.4	462.0	542.5	514.0	881.2	987.5	1,316.8
Water connect-tion	Number gallons	Capital area	456	1500	2398	3417	4437	5020	5632	7078	8766	10,105	16,645	19,750	22,149	25,066	27,900
		Southern region	--	--	--	156	390	--	--	--	--	--	--	--	--	--	--

Source: Statistical Year Book, 1985.

Note: N.A. not available.

Table 36. <u>Production and consumption of water in the capital area and the southern region</u>
(Millions gallons)

Period	Consumption			Production		
	Total	Southern region	Capital area	Total	Southern region	Capital area
1978	1,606.7	479.4	1,127.3	1,744.7	479.4	1,265.3
1979	1,822.8	462.0	1,360.8	2,208.0	462.0	1,746.0
1980	2,074.8	542.5	1,532.3	3,001.2	542.4	2,458.7
1981	2,395.3	514.0	1,881.3	3,591.0	614.8	2,976.2
1982	3,482.5	881.2	2,601.3	4,490.1	933.5	3,556.6
1983	3,927.6	987.5	2,940.1	5,293.6	1,013.3	4,280.3
1984	4,368.3	1,316.8	3,051.5	5,682.4	1,349.3	4,333.1
1985	5,670.9	1,501.2	4,169.7	7,882.0	1,517.9	6,364.1*
<u>1986</u>						
1st Quarter	1,345.8	388.4	957.4	1,930.7	391.4	1,539.3**
2nd Quarter	1,611.7	420.2	1,191.5	2,385.8	423.1	1,962.7**

<u>Source</u>: Sultanate of Oman, Development Council, Technical Secretariat, <u>Quarterly Bulletin on Main Economic Indicators</u>, (Directorate General of National Statistics, 1986).

* Including (109.5) million gallons purchased from Oman Petroleum refinery in 1985.

** Including 27.0 million gallons purchased from Oman Petroleum refinery in first quarter and 27.6 million gallons in the second quarter, 1986.

Table 37. Domestic water need estimates for towns in northern Oman
(litres per capita, per day)

	1980	1985	1990
Standpipes	50	50	50
Tanker delivery	80	100	150
House connections	100	150	200

Source: United Nations Economic and Social Commission for Western Asia, Development of Guidelines for the Economic Use of Water in the ESCWA Region, (E/ESCWA/NR/85/19), 1986, p. 56.

Besides the main desalination plant in the capital area, there are a number of small plants scattered in Oman, almost all of them at the seashore (except one, near Haima in the southern interior). These plants have capacities between 0.011 and 0.255 million gallons per day.1/

Besides the capital area, the towns of Sohar, Nizwa, Sure and Salalah have water supply systems.2/

The customer relations for electricity and water is operated by a shareholding company (OIFC). The company performs all the readings of metres, controlling them, and collecting money on behalf of the Ministry of Electricity and Water. The Ministry was established in 1978 and has been given all the responsibility and functions in the sectors of electricity and water.

There is a sewerage system with a treatment plant in only one part of Greater Muscat, namely in Mutrah. All other areas of the capital and the other towns are generally served by individual waste water and sewerage arrangements. Septic tanks and "soakaway" are mainly used in the urban areas. No organized sewerage disposal facilities exist in rural areas.

The above-mentioned report published by ESCWA in 1986 on the development of guidelines for the economic use of water in the ESCWA region contained the following recommendations for Oman:

1/ Sultanate of Oman, Development Council, Socio-Economic Atlas, (Muscat, 1985).

2/ Ibid.

(a) Every township and village should be provided with reasonable accessible clean and safe water through heavy government investment in water supply and sewerage schemes. A minimum of 100 litres per capita per day is recommended for the urban population and 50 a day for the rural population;

(b) An equitable tariff system is recommended to cover the cost of maintenance, operation and replacement;

(c) Standpipes should be fully subsidized;

(d) Sufficient funds should be allocated for health education and environmental protection activities;

(e) A national water resources authority should be established for water resources development, conservation and control and for setting standards;

(f) A comprehensive plan for rural water supply and sanitation should be prepared;

(g) As the main source of domestic water in rural areas, falaj systems must be well maintained and protected from pollution;

(h) Measures should be taken to improve irrigation efficiency, reduce agricultural water consumption and introduce water saving irrigation methods including canal lining, use of sprinklers and drip irrigation;

(i) Recharge schemes should be prepared which will not only minimize losses and recharge the coastal alluvial fans, but will also help in control of saline water intrusion;

(j) Solar stills along the Omani coasts and cloud-seeding activities should be introduced in Oman.

2. Electricity

Oman has progressed enormously in production of electricity in the last 15 years, before this even in the capital area, citizens had to carry lanterns at night because there were no street lights.

In 1985 total production of electricity in the capital and southern region reached 2,137.8 million kilowatts, which was 498.7 million kilowatts in 1978. The amount of total electricity produced in Oman in 1970 was only 8,012 thousand kilowatts. In this period of 15 years, the production of electricity increased more than 250 times.

The production in the capital area is provided from the plants in Mina Al-Fahal, Rusail, Qhubra and Riyam. The production at Qhubra is about 57 per cent of all the production which was 1,862.8 million kilowatts in 1985. The plant at Rusail provided about 42 per cent of the total production. In 1986, production at Riyam was stopped.

The total production of electricity in 1984 was 2,016.3 million kilowatts, of which about 70 per cent was produced in the capital area.

The production of the remaining 30 per cent, was distributed as 11.2 per cent in the southern and 13.8 per cent in the other parts of Oman. Information on the production and consumption of electricity in the capital area and the southern region is presented in table 38.

In 1985, there were more than 25 electricity production stations in Oman with different capacities. The generators used in Oman are of three kinds. In the remote areas diesel engines are used. Natural gas turbines are usually used for larger production capacities. In the capital area, also steam turbines are used.

The total electricity connections in Oman were 131,059 in 1984. Of all these connections, about 43 per cent were in the capital area. At the end of September 1986, however, the number of total connections increased to 166,129, with the share of the capital area still 43 per cent. The increase of connections in the capital area, from 56,718 in 1984 to 71,720 in 1986, indicates a growth of more than 26 per cent in the two-year period.[1/]

Electricity is sold at subsidized prices to citizens. The subsidy ratio is about 50 per cent in the capital area. In other regions the subsidy ratios re higher. The connection fees are different, depending on the capacity. For the single phase residential connection, RO 100 is charged. A three phase connection, without transformer, is RO 300 and RO 500 with transformer. Other than the residential units, the connection fee is calculated as RO for each kilowatt of the capacity. The industrial plants, however, have special rates which are much lower.

As for water, the electricity consumption fees are collected by the special company (OIFC) and delivered to the Ministry of Electricity and Water. The Ministry employs about 1,800 persons, of which 867 are in the General Directorate of Electricity.

3. Transport and communications

Until 1970 the transportation facilities were very limited in Oman. The highway network consisted of only about 10 km of paved roads and an unknown length of unpaved tracks. Marine and air transport were also very limited. The developments in the transportation sector, with the highway network, in marine transport, with two modern deep water ports and one oil port, and in air transportation with one international and other airports, are significant Land transport services currently contribute about 4 per cent of the non-oil GDP.[2/]

1/ Information form the Ministry of Electricity and Water.

2/ World Bank, Oman, A Highway Maintenance Project, 1985.

Table 38. <u>Production and consumption of electric power in the capital area and southern region</u>

Period	Consumption							Production						
			Capital area							Capital area				
	Total	Southern region	Total	Mina Al-Fahal	Rusail	Ghubra	Riyam*	Total	Southern region	Total	Mina Al-Fahal	Rusail	Ghubra	Riyam*
1978	451.7	83.5	368.2	30.6	-	302.1	35.5	498.7	91.3	407.4	30.6	-	338.8	38.0
1979	559.9	96.5	463.4	29.5	-	411.4	22.5	629.1	101.9	527.2	29.5	-	473.0	24.7
1980	730.1	115.9	614.2	27.4	-	558.1	28.7	791.7	122.2	669.5	27.4	-	610.9	31.2
1981	886.6	138.0	748.6	22.8	-	716.7	9.1	952.4	145.7	806.7	22.8	-	773.4	10.5
1982	1,091.1	164.6	926.5	24.2	-	881.5	20.8	1,161.0	173.8	987.2	24.2	-	940.1	22.9
1983	1,298.3	187.5	1,110.8	22.2	-	1,057.6	31.0	1,388.5	198.6	1,189.9	22.2	-	1,134.0	33.7
1984	1,649.2	211.3	1,437.9	12.3	462.8	949.0	13.8	1,751.3	226.5	1,524.8	12.3	465.8	1,031.3	15.4
1985	2,024.3	255.7	1,768.8	9.7	776.3	982.3	0.5	2,137.8	275.0	1,862.8	9.7	782.9	1,069.5	0.7
<u>1986</u>														
1st Quarter	332.3	53.8	278.5	1.9	110.8	165.8	-	359.3	58.1	301.2	1.9	112.0	187.3	-
2and Quarter	736.3	92.5	643.8	2.5	320.7	320.6	-	780.3	98.8	681.5	2.5	322.8	356.2	-

<u>Source</u>: Oman, Development Council, Technical Secretariat, <u>Quarterly Bulletin on Main Economic Indicators</u>, (Directorate General of National), 1986.

* Closed in the second quarter 1985.

There are no railways in Oman. Recently a study was undertaken to investigate the possibilities and economic viability of constructing a railway connecting Oman to Iraq, as a railway network of the Gulf Co-operation Council. This railway would be mainly for the transport of minerals.

(a) Highways

The national highway network is under the jurisdiction of the Directorate General of Roads, within the Ministry of Communications. Other special purpose roads and tracks are under the jurisdiction of Petroleum Development Oman (PDO) and the Ministries of Interior and Defence. The network covers almost all the activity centres and rural production areas.

During the past 10 years considerable progress has been made in the land transport system; however, traffic growth, which is about one and a half to two times more than the growth of GDP, will clearly intensify the needs of continued highway improvements in the foreseeable future.

The length of asphalted roads amounted to 3,830 kms by the end of 1985. The progress in the construction of asphalt roads has been remarkable. Between 1970 and 1980 the major roads were constructed, increasing the existing road network in 1970 about 200 times. Between 1980 and 1985 the length of asphalt roads doubled again. The length of graded roads has increased tenfold since 1970, to a total length of 18,280 kms in 1985. The total number of vehicles in Oman was 241,721 at the end of 1985, and there were 16,596 road accidents in the same year, causing 382 fatalities. About 44 per cent of all vehicles were private cars and 40 per cent were commercial vehicles; there were about 5,000 taxis serving all Oman.

Information on the roads and road transport are presented in tables 39 and 40 and the details on the asphalt roads are presented in Annex XVIII.

Table 39. Roads and road transport

Item	Unit	1970	1975	1980	1981	1982	1983	1984	1985
Roads									
Asphalt	km	10	708	2173	2835	2875	3222	3308	3830
Graded	km	1817	5495	14703	16276	18123	18667	19338	18280
Vehicles on road	Number	NA	31468	107627	133242	161885	188794	214342	241721
Road Accidents	Number	NA	1874	5849	9634	12306	11631	14723	16596
Fatalities	Number	NA	183	376	406	405	247	345	382

Source: Oman, Development Council, Technical Secretariat, Oman Facts and Figures 1985 (Directorate General of National Statistics, Muscat, 1986) (henceforth known as "Oman Facts and Figures").

Table 40. Vehicles on the road

Year	Class of registration								
	Private	Taxis	Public service	self-drive hire	Commercial	Government	Diplomatic	Motorcycles	Total
1971-1975	8,994	732	928	7	15,108	3,489	101	2109	31468
1976	13,283	1,525	928	20	20,360	4,713	120	3224	44173
1977	18,984	2,365	928	20	25,707	5,935	146	4063	58148
1978	25,045	2,741	928	44	30,936	6,647	157	5010	71508
1979	32,104	2,975	928	68	36,783	7,435	207	5987	86487
1980	42,596	3,114	928	87	43,941	9,142	360	7459	107627
1981	55,081	3,685	928	117	53,318	10,810	388	8915	133242
1982	68,975	4,209	928	170	63,907	12,625	424	10680	161918
1983	82,848	4,734	928	179	74,084	13,413	468	12173	188827
1984	93,359	4,818	928	194	85,889	15,224	496	13467	214375

Source: Statistical Year Book, 1985.

Table 41. Government investments by sectors and their shares (1978-1984)

(Millions of Omani Rials)

	1978		1979		1980		1981		1982		1983		1984	
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
A. Commodity production sectors														
1. Crude oil	33.7	18.1	63.7	29.5	77.8	25.4	76.7	19.8	106.8	22.1	86.8	16.4	91.1	14.2
2. Natural gas	4.4	2.4	2.2	1.0	4.8	1.6	7.5	1.9	1.1	0.2	5.1	1.0	9.7	1.5
3. Other minerals	0.9	0.5	0.4	0.2	9.8	3.2	20.3	5.2	26.6	5.5	11.7	2.2	3.6	0.5
4. Agriculture	2.9	1.5	3.6	1.7	4.3	1.4	5.2	1.3	6.0	1.3	5.0	0.9	8.4	1.3
5. Fisheries	0.7	0.4	1.4	0.7	1.9	0.6	1.3	0.3	1.2	0.3	1.1	0.2	1.8	0.3
6. Industry			0.2	0.1	6.7	2.2	31.2	8.0	25.6	5.3	10.5	2.0	2.4	0.4
7. Total (1 to 6)	42.6	22.9	71.5	33.2	105.3	34.4	142.2	36.5	167.3	34.7	120.2	22.7	117.0	18.2
B. Service production sectors														
8. Housing	5.6	3.0	7.7	3.6	3.8	1.2	4.2	1.1	20.4	4.2	25.6	4.8	23.2	3.6
9. Commerce	0.5	0.3	0.1	--	0.4	0.1	7.4	1.9	8.9	1.9	25.5	4.8	36.2	5.6
10. Electricity	12.7	6.8	12.3	5.7	19.5	6.4	19.6	5.0	35.0	7.3	34.4	6.5	33.9	5.3
11. Water	4.7	2.5	7.4	3.4	5.4	1.8	13.1	3.4	16.0	3.3	14.0	2.6	15.6	2.4
12. Post and telecommunication	5.2	2.8	3.4	1.6	2.4	0.8	2.0	0.5	4.4	0.9	14.0	2.7	32.5	5.1
13. Financial institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14. Total (8 to 13)	28.7	15.4	30.9	14.3	31.5	10.3	46.3	11.9	84.7	17.6	113.5	21.4	141.6	22.0
C. Infrastructure														
15. Irrigation and water resources	0.7	0.4	1.2	0.6	1.7	0.6	5.2	1.3	6.5	1.4	6.2	1.2	12.0	1.9
16. Roads	18.0	9.7	49.4	22.9	45.8	15.0	66.8	17.2	44.0	9.1	42.7	8.1	47.3	7.4
17. Ports	8.1	4.4	8.3	3.9	9.2	3.0	3.5	0.9	6.1	1.3	4.0	0.8	1.6	0.2
18. Airports	2.6	1.4	5.0	2.3	5.2	1.7	2.2	0.6	1.4	0.3	1.4	0.3	3.5	0.5
19. City planning and municipal services	2.8	1.5	7.2	3.3	17.2	5.6	19.1	4.9	16.7	3.5	14.8	2.8	22.1	3.4
20. Education	6.5	3.5	4.2	1.9	5.4	1.8	9.4	2.4	35.6	7.4	29.3	5.5	41.5	6.5
21. Vocational training	0.7	0.4	3.7	1.7	3.2	1.1	2.7	0.7	6.0	1.2	7.6	1.4	6.9	1.1
22. Health	3.8	2.0	3.3	1.5	4.1	1.3	5.9	1.5	5.9	1.2	11.9	2.2	21.9	3.4
23. Information, culture and religious services	4.0	2.1	2.1	1.0	5.9	1.9	3.1	0.8	9.8	3.0	13.3	2.5	21.9	3.4
24. Social service centres	0.6	0.3	1.2	0.6	1.9	0.6	2.1	0.5	2.1	0.4	3.4	0.6	3.2	0.5
25. Government administration**	67.0	36.0	27.7	12.8	69.4	22.7	81.1	20.8	96.1	19.9	161.6	30.5	202.5	31.5
26. Total (15 to 25)	114.8	61.7	113.3	52.5	169.0	55.3	201.1	51.6	230.2	47.7	296.2	55.9	384.4	59.8
27. Grand Total (7+ 14 + 26)	186.1	100.0	215.7	100.0	305.8	100.0	389.6	100.0	482.2	100.0	529.9	100.0	643.0	100.0

Source: Statistical Year Book, 1985.

* Including irrigation and water resources.

** - 1971 and 1972 including capital expenditures on electricity and water, transport and communication, agriculture and irrigation, information and culture and the Dhofar development project.
- 1973 including capital expenditures on electricity and water, transport and communication and the Dhofar development projects.
- 1974 including unclassified capital expenditures of the amount of 25.1 M.O.R.
- Starting from 1976 capital expenditures of a civil nature carried out by Defence and National Security have been included.

The investments made in the sectors of roads, ports and airports and their shares in the total infrastructure investment and total investments are presented in table 41. In the past few years, the highest investments for roads were made in 1981 with RO 66.8 million. The share of road investments in total investment has been around 8 per cent with a slightly declining trend. The decline in financial allocations is to be expected, as the major highway infrastructure has been completed, and efforts have been redirected towards maintenance and improvement of the existing network.

(b) Ports and civil aviation

Oman has a number of natural harbours, including the historically important small port of Muscat in the capital area. The largest existing port, Port Qaboos, was completed in 1975. Port Qaboos, which is a deep water port, is very close to Muscat and is provided with modern facilities. The port has 11 berths, 10 transit sheds, a cement silo, fish canning and general deep freezing facilities, and a grain silo. Mina Al Fahal, which is also in the capital area, is a specialized port used for oil exports. The southern region, near Salalah, has the second largest port of Oman. Port Rasyut's expansion was completed by the end of 1980 to handle 1 million tons a year. In Oman there are also several natural coastal harbours for small boats which are called dhows.[1/] Information on the cargo flows through seaports in Oman is presented in table 42.

Civil air transport has developed considerably in Oman. Seen International Airport, about 30 km west of Muscat, which opened in late 1972, can handle the largest commercial airplanes and expansion of its repair and hangar facilities was recently completed. The number of landings and take-offs at Seen airport reached 33,000 in 1985. The number of passenger arrivals in 1985 was 481,000 and the number of passenger departures was 454,400.[2/] The Muscat-Salalah domestic route carried 63,000 passengers in 1984. Flights to regional centres, Khasab (Musandam), Baya, Sure, Masirah and Buraimi, started in September 1984. Information on civil aviation activities is presented in table 43.

(c) Post and telecommunications

In 1970 Oman had only one post office and about 200 telephone lines restricted to the capital area. The number of post offices in 1985 reached 63. There were also 360 public mail boxes in several parts of the country. The number of telephone lines installed, with an increase of about 75 per cent over 1984, reached 41,320 in 1985. The new telecommunications centre, constructed in Bait al Falaj in the capital area, expanded the capacity of telephone and telex facilities to a great extent. The new network has increased the number of available telephone lines in the capital area from 27,000 to 83,000 and those in Salalah in the south from 6,000 to 12,000.[3/] Information on the development of post and telecommunication facilities is presented in table 44.

1/ World Bank, Oman, A highway Maintenance Project, 1985, p. 3.

2/ Oman, Facts and Figures.

3/ Oman, Ministry of Information, Oman 1985, p. 85.

Table 42. Cargo flows through seaports

Item	Unit	1980	1981	1982	1983	1984	1985
Tonnage discharges by ships	Thousand tons	1,306	1,827	2,277	1,638	1,537	1,565
- Mina Qaboos	Thousand tons	1,244	1,614	2,025	1,341	1,205	1,249
- Mina Raysut	Thousand tons	NA	NA	172	242	209	200
- Mina Al Fahal (dry cargo)	Thousand tons	57	211	75	53	119	108
- Others*	Thousand Tons	5	2	5	2	4	8
Vessels entered	Number						
- Mina Qaboos	Number	920	1,117	1,373	1,527	1,481	1,580
- Mina Raysut	Number	218	222	257	285	275	322
- Mina Al Fahal	Number	540	553	545	412	475	428

Source: Oman, Facts and Figures.

* Other Ports like Sur, Al khabura, Sohar Khasab and Saham.

Table 43. Aircraft movements, passengers and cargo handled at Seen International Airport

Item		Unit	Years 1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
A. International													
Civil aircraft	Landing	Number	N.A.	7508	7706	12978	13676	14302	12479	14878	13509	13956	14444
	Take-off	Number	N.A.	7503	7694	12958	13660	14293	12463	14855	13491	13949	14488
	Total	Number	20122	15011	15400	25936	27336	28595	24942	29733	27000	27905	28932
Passengers	Arrival	Thousand	87.1	145.7	171.9	193.3	192.2	213.6	234.7	288.9	329.8	395.5	432.5
	Departure	Thousand	73.8	118.7	151.8	180.5	178.7	193.2	213.4	243.6	293.9	345.7	399.1
	Transit	Thousand	N.A.	32.1	47.3	124.7	156.1	299.2	246.3	267.4	294.3	360.6	418.5
	Total	Thousand	161.0	296.5	371.0	498.5	527.0	636.0	694.4	799.9	918.0	1101.8	1250.1
Cargo handled	Unloaded	Tonnes	3015	10029	10736	11972	9565	8665	9304	9945	12533	13623	17283
	Loaded	Tonnes	597	978	1915	1311	1578	2095	2555	2655	2962	3162	2899
	Total	Tonnes	3612	11007	12651	13283	11143	10760	11859	12600	15495	16785	20182
B. Domestic													
Passengers Muscat - Salalah			-	-	-	-	-	-	-	-	55.4	56.8	63.0
Omani			-	-	-	-	-	-	-	-	23.3	25.1	27.2
Non-Omani			-	-	-	-	-	-	-	-	32.1	31.7	35.8
Other routes*			-	-	-	-	-	-	-	-	-	-	69.6

Source: Statistical Year Book, 1985.

* Other routes which started in September 1984 are Khasab, Baya, Sure, Masirah and Buraimi.

Table 44. Posts and telecommunications

Item	1970	1975	1980	1981	1982	1983	1984	1985
Post offices and sub-post offices[a/]	2	27	43	48	49	50	56	63
Letter boxes	--	167	168	237	242	273	320	360
Private post office boxes	650	4,730	16,867	20,167	22,700	22,700	28,050	31,250
Telephone lines installed	557	3,701	15,044	17,286	19,642	21,370	23,391	41,320

Source: Oman Facts and Figures.

a/ Including one mobile post office.

E. Construction sector activities and construction materials

1. Construction activities in GDP and total fixed capital formation

The share of the construction sector in GDP has shown a decline in the period 1976-1980, and an increase since 1980 in current prices. In 1984, the share was 7.40 per cent, while it was 5.71 per cent in 1980 with current prices. In 1978 constant prices, the share of construction activities in GDP has shown a steady increase since 1978. It was 8.73 per cent in 1980 and rose to 11.82 per cent in 1984.

The shares of construction sector activities in GDP in current and 1978 constant prices and their annual growth rates are presented in table 45.

Table 45. Share of construction sector in GDP (percentage) and annual growth rates (1978-1984)

	1978	1979	1980	1981	1982	1983	1984
Share of construction sector at 1978 constant prices	7.54	7.56	8.73	8.74	10.41	10.94	11.82
(Annual growth rate %)		4.48	22.51	17.15	32.94	22.71	25.87
Share of construction sector at current prices	7.54	6.68	5.71	5.82	6.50	6.84	7.40
(Annual growth rate %)		20.59	36.82	23.00	17.18	10.36	20.22

Source: Statistical Year Book, 1985.

The highest growth rates in the relative shares of construction sector activities in GDP at both 1978 constant and current prices were realized in the years 1980 and 1982 respectively. The highest growth rate at 1978 constant prices was 32.94 per cent and, at current prices, was 36.82 per cent. In current prices, the 1984 GDP in the construction sector was RO 225.3 million.

In table 46, information on the shares of public and private fixed capital formation in GDP at current prices, and the housing fixed capital formation shares in the total fixed capital formation, and in the total public and private fixed capital formations, is presented. The share of total housing fixed capital formation in GDP is also calculated. When tables 45 and 46 are compared, it can be observed that construction activities take a share of about one fourth of the annual total fixed capital formation.

Table 46. <u>Share of total fixed capital formation in GDP, at current prices (million RO) and fixed capital formation in the housing sector</u>

	1978	1979	1980	1981	1982	1983	1984
GDP	946.9	1289.9	2063.5	2490.5	2613.6	2739.9	3044.9
Total fixed capital formation	273.5	335.4	465.7	583.5	706.7	736.9	903.7
B/A %	28.88	26.00	22.57	23.43	27.04	26.90	29.68
Private fixed capital formation	87.4	119.7	159.9	193.9	224.5	207.0	260.7
C/B %	31.96	35.69	34.34	33.23	31.77	28.09	28.85
Public fixed capital formation	186.1	215.7	305.8	389.6	482.2	529.9	643.0
D/B %	68.04	64.31	65.66	66.77	68.23	71.91	71.15
Total fixed capital formation in housing	38.6	50.4	60.2	62.0	73.4	85.4	79.5
E/B %	14.11	15.02	12.93	10.83	10.39	11.53	8.80
Total fixed capital formation in housing (private sector)	33.0	42.7	56.4	57.8	53.0	59.4	56.3
F/C %	37.76	35.67	35.27	29.81	23.60	28.70	21.60
Total fixed capital formation in housing (public sector)	5.6	7.7	3.8	4.2	20.4	25.6	23.2
G/D %	3.01	3.57	1.24	1.08	4.23	4.83	3.61
Housing fixed capital formation share in GDP E/A %	4.08	3.91	2.92	2.49	2.81	3.10	2.61

<u>Source</u>: Based on data from the <u>Statistical Year Book 1985</u>, and ESCWA calculations.

Private fixed capital formation takes a share of about 30 per cent of the total fixed capital formations in Oman and shows a declining trend. In 1979, the private share in capital formation was the highest in the last 10 years by 35.69 per cent.

The proportion of housing fixed capital formation in total fixed capital formation shows a declining trend. In 1984 the proportion was 8.80 per cent. The share of private housing fixed capital formation to total private fixed capital formation is also sharply declining. In 1978 the share was 37.76 per cent and dropped to 21.60 per cent in 1984. The absolute values in current prices, on the other hand, show more or less a consistent amount spent annually. The number of housing units constructed annually and their rather stable costs also show that the decline in the share of housing investments in relation to total investments is due to the increasing investments in other sectors.

The share of housing fixed capital formation in GDP has been fluctuating between 4.08 and 2.49 per cent and is showing a declining trend. These figures are relatively low when compared with other rapidly developing countries.

2. Construction companies

There were 4,321 construction companies registered in Oman at the end of 1984. This was about 19 per cent of all companies registered. When compared to the number of companies engaged in other activities, the construction sectors seem quite formalized. There was an average of 365 construction companies registered annually during the period 1980-1984.

The majority of the companies, however, are very small enterprises. More than half of the construction companies registered had a capital range of between RO 10,000 and 25,000. The number of companies with a capital of RO 100,000 and higher in 1984 was 260. The number of big construction companies with capitals of RO 1 million and higher was 13.

Information on the establishment years and capital ranges of the construction companies is presented in table 47.

There were 269 professional companies registered in Oman in 1984 for consultancy work. Of these companies 47 were architectural engineering, 29 civil engineering, 10 electrical engineering, 6 mechanical engineering and 8 industrial engineering and 83 were general engineering consultancy companies. Of the above-mentioned companies 71 per cent were foreign.

The government tenders are usually given through the Tender Council (Board). Small-scale work is sometimes tendered out by the Ministries or other government organizations themselves. These tenders, however, have to be approved by the Tender Council before becoming effective. The amount of such outside tenders adds up to about 25 per cent of all the tenders. In 1984, for example, the amount of the tenders made by the Tender council was about RO 89 million and the tenders made outside the Tender Council, but approved by the Council, amounted to about RO 25 million. The total amount of tenders in 1984 was RO 115,011,395.

Table 47. Construction companies registered in Oman (Capitals and registration years)

Capital (Thousand Omani rials)	Number of companies											
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	Total
2 under 5	4	65	71	16	11	10	5	9	7	18	24	240
5 under 10	9	51	46	40	28	65	29	28	28	30	60	414
10 under 25	9	139	442	261	177	459	206	294	190	166	257	2600
25 under 50	11	75	78	52	29	43	38	64	40	55	44	529
50 under 100	8	57	29	23	12	16	14	22	24	31	42	278
100 under 250	6	44	18	15	10	12	4	8	13	17	24	171
250 under 500	–	15	2	5	3	6	2	8	5	7	5	58
500 under 1,000	2	4	2	4	–	1	–	–	2	1	2	18
1,000 under 2,000	–	3	–	1	–	–	–	–	–	2	1	7
2,000 under 3,000	–	–	–	1	–	–	–	–	–	–	–	1
3,000 under 4,000	–	–	–	1	–	–	–	–	–	1	–	2
4,000 under 5,000	–	–	–	–	–	–	–	–	–	–	–	–
5,000 and over	–	–	–	1	–	–	–	–	–	–	2	3
Total	49	453	688	420	270	612	298	433	309	328	461	4,321

Source: Statistical Year Book, 1985.

The amount of tenders given by the Tender Council in 1985, classified according to month and type of company, is presented in table 47. In table 48, the tenders given by the Tender Council in 1984 and 1985, according to type of company, are presented.

Table 48. Value of tenders given by the Tender Council during 1985, by month and type of company (in RO)

Month	National	Joint venture	Foreign	Consultancy	Total
January	2,208,869	2,015,377	--	--	4,224,246
February	1,351,883	2,387,456	--	--	3,739,339
March	5,921,521	463,959	412,420	--	6,797,900
April	4,031,680	289,175	--	--	4,320,855
May	15,251,680	3,291,936	3,668,820	--	22,212,426
June	2,517,758	3,489,393	--	--	5,007,151
July	11,729,581	3,339,010	--	--	15,068,591
August	4,063,569	2,230,097	--	--	6,288,666
September	9,543,077	304,401	--	--	9,847,478
October	5,985,450	1,136,826	1,447,331	--	8,569,607
November	2,975,025	--	797,023	--	3,773,048
December	4,582,384	15,432,209	19,119,000	308,380	39,441,873
Total	70,167,477	33,369,839	25,444,594	308,380	129,290,190
Percentage	54.27	25.81	19.68	0.24	100.0

Source: Omani Chamber of Commerce.

Table 49. Tenders given by the Tender Council in 1984 and 1985 according to types of companies and their shares (percentages)

Month	Type of companies				
	National	Joint venture	Foreign	Consultancy	Total
1984 a/	71,230,646	128,762	19,459,633	6,192,354	115,011,395
%	61.93	15.76	16.92	5.39	100.00
1984	64,739,520	8,617,035	13,623,557	1,975,099	88,955,211
%	72.78	9.69	15.32	2.22	100.00
1985	70,167,422	33,369,839	25,444,594	308,380	129,290,190
%	54.27	25.81	19.68	0.24	100.00

Source: Omani Chamber of Commerce.

a/ The total tenders given and approved by the Tender Council in 1984.

As can be observed in table 48, from 1984 to 1985 there was an increase of about 45 per cent in the amount of tenders given by the Tender Council. It is also understood that the tenders to the joint venture companies have increased about threefold, from 9.69 to 25.81 per cent. When the tenders approved by the Tender Council in 1985 are added to the 1985 tenders given by the Tender Council only, (the data are not available) it may be estimated that the share of joint venture companies in the total number of tenders will be even higher for 1985.

3. Employment in the construction sector

The data for employment are quite limited and figures for the construction sector basically depend on estimates. According to ESCWA estimates for 1984, there were 42,652 persons engaged in construction activities. This was 13.0 per cent of the total economically active population. Of the total number of persons working in construction activities 42,427 were male. The proportion of the male economically active population working in construction activities in relation to the total male active population was 14.4 per cent. The number of females working in construction activities was negligible.

The number of labour cards issued to expatriate workers in the construction sector working for the private sector indicates a higher level of total employment in the construction sector than estimated by ESCWA. The number of expatriates in the construction sector for 1984 was 64,441 (not taking into account the 99,694 cards issued for construction and trade sector workers combined.[1]

1/ Statistical Year Book,1985, (see annex 7).

Expatriate labour in construction activities consistently increased between the years 1980 and 1984. In 1980, the number was around 33,000.

When these two figures (on labour cards and expatriates) are evaluated together, with the number of registered construction companies on the other hand providing supplementary data for the estimation of the actual number of employees in the construction sector, it may be estimated that there were around 100,000 persons involved in construction activities in 1984. Since 1984, however, a stagnation, even decline trend in the volume of construction activities, parallel to the general contraction in economic life, has been observed. In this connection, the number of economically active persons in the construction sector in 1986 should be less than the level in 1984.

4. Construction materials, resources and production

In 1981, the Omani Government commissioned a study on raw building industry raw materials. The study approached the subject from a geological standpoint and emphasis was placed on the location, sampling and assessment of currently undeveloped raw materials. The term raw material was interpreted to mean mineral raw materials and did not include timber, paper, plastics, etc.

The study identified eight raw materials, namely asbestos, cement (considered as a raw material), gypsum, dolomite, clay, marble and decorative stone, glass raw materials, sand, gravel and crushed aggregate. Sand, gravel and aggregate were not studied in great depth since there was already an efficient industry in the private sector, which was supplying all local and export demand. Sheet glass production was also not studied on the assumption that the establishment of an economic capacity plant would not be feasible due to limited demand and import competition. Dolomite was considered as a potential raw material for the plaster industry in addition to gypsum.

The study found asbestos mining-processing-manufacturing activities to be the most attractive field for the construction materials industry. However, it was recommended that exploration studies should be made for further potential asbestos or deposits.

Small- to medium-size deposits of high-grade marble are scattered throughout northern Oman. The marketing of marble products is quite difficult and depends on the availability of adequate supplies consistent in colour, appearance, size, shape and physical properties. The basic infrastructure for the marble industry currently exists in Oman in the private sector.

Gypsum of apparently high purity is present in huge deposits about 40 km north of Salalah. Since the use of gypsum is required in cement production, the development of gypsum quarrying has been in parallel to cement production.

Currently all high quality ceramic ware is imported. The regular wall and floor tiles are locally produced and the production is enough for local consumption.

According to the 1986 building manufacturers register[1/] there were 15 companies manufacturing different sorts of tiles, pavements, blocks, stairs and similar materials. The manufacturers' annual production capacities differed between 300,000 to 9 million units of tiles. The number of concrete block-producing companies was more than 55. Their capacities differed in a large range from 300,000 to 3 million blocks a year. There were 25 companies registered for provision of aggregates, crushed and washed sand and similar materials. For such materials there were many other smaller manufacturers (or transporters) which were not listed in the registers. There were three marble-based manufacturing companies and four companies for the provision of concrete.

In Oman, there are two cement factories: one in the capital area in Rusail, with a current annual capacity of 624,000 tons, and the second at Salalah, with an annual capacity of 210,000 tons. These two factories provide for about half of the total cement consumption in Oman.

The use of bricks, owing to their higher price, is not very common in Oman and production is quite limited. The silicon-lime brick factory in the capital area produces about 12 million bricks and 37,000 tons of lime annually. Many other construction materials such as insulation elements (polystyrene, polyurethane), PVC and fibreglass pipes and tanks, aluminium door and windows and wooden elements are locally produced to a great extent. The aluminium profile factory at the Rusail Industrial Site is still in the construction stage. After its completion there will be more aluminium elements produced locally.

The three paint factories in Oman are able to produce about 9 million litres of paint annually.[2/]

Many of the construction materials have been subject to standards set by the Ministry of Commerce and Industry. For example, the standards for pre-cast concrete blocks and cement flooring tiles were set in 1977, the standards for building sand from natural resources in 1978, the standards for ordinary Portland cement in 1979, and the standards for calcium silicate brick in 1983. Standardization studies are consistently improving in conformity with the Standardization and Metrology Organization for the Gulf Co-operation Council, the Arab Organization for Standardization and Metrology (ASMO) and the International Organization for Standardization (ISO). Oman is a member of these organizations.

The price indices of the cost of construction materials to contractors in the construction industry are presented in table 50.

1/ Omani Manufacturers Directory 1986 (Oman Advertising Agency, 1986).

2/ Information from the Omani Ministry of Commerce and Industry.

It was observed that in 1985 and the first two quarters of 1986 the cost of many items was lower than in 1974. Cement, steel reinforcement bars and timber are the basic materials whose costs are comparatively very low. Iron pipe and emulsion paint costs have recently been twice as high as in 1974.

5. Construction materials, imports and exports

Oman, despite increasing production of some construction materials locally, is substantively importing materials for construction activities. The value of imported construction materials in the period 1974-1984 shows a steady increase. In 1984 the total price for the imported construction materials was more than RO 200 million, which was more than twice than the level in 1980, and about six times more than the level in 1974.

In 1984, in comparison with all imports in the construction sector the highest amounts were paid for the importation of construction machinery, (15.5 per cent), cast-iron pipes, tubes and fittings (14.5 per cent), and cement (10.7 per cent). The price paid for the import of construction machinery in the years before 1984 was the largest amount for the construction sector.

In 1985, there were some fluctuations in the import of construction materials. The level of cement imports (both in value and quantity) was slightly higher than the level of 1984. The level of iron or steel tubes, pipes and fittings imports in 1985, on the other hand, was about 33 per cent less than the level in 1984. Oman imports cement from the United Arab Emirates.

The other construction materials are imported from different countries. The largest amount of iron or steel tubes, pipes and fittings in 1985, was imported through the Federal Republic of Germany.[1/]

The value and quantity of imports of selected construction materials are presented in tables 51 and 52.

Oman has been exporting some materials used in construction such as wood, iron and steel, sanitary and pumbing fixtures, lime, cement and asbestos materials in limited quantities. The countries which provide markets for such exports are generally the neighbouring or Gulf Co-operation Council countries. The majority of the items thus exported from Oman are handled as re-exports.

1/ Oman, Foreign Trade Statistics 1985 (Directorate General of Customs, 1985).

Table 50. Price indices of cost of construction materials to contractors in construction industry

(March 1974 = 100)

Material	1986 QR. 2	1986 QR. 1	1985	1984	1983	1982	1981	1980	1979
Ordinary Portland cement (bagged)	78	78	74	76	64	93	128	137	112
White cement	92	91	87	84	108	127	148	145	109
Mild steel reinforcement bars	67	67	62	59	57	64	89	97	97
Timber: Hard wood	112	112	111	111	134	140	169	124	121
Timber: Soft wood	45	43	39	46	60	62	70	87	75
Timber: Plywood	120	111	110	104	118	137	171	108	106
Sand	133	129	129	177	200	177	163	158	121
Crusher	99	106	104	107	130	136	152	152	114
Pre-cast concrete building blocks	108	106	104	130	153	156	159	165	152
Glass	101	98	94	118	125	123	126	112	111
P.V.C. pipes	136	121	121	126	139	136	159	136	130
Cast iron pipes	201	190	169	165	111	127	124	117	119
Pitch fibre pipes	143	150	146	137	144	145	185	122	134
Emulsion paint	226	204	205	192	223	221	276	236	170
Gloss paint	169	171	169	177	184	224	225	190	155
Cement wash	186	183	171	188	210	236	217	152	140

Source: Quarterly Bulletin on Main Economic Indicators, 1986.

Table 51 Value of recorded imports of selected construction materials during 1974-1984

(Value in thousands Omani rial)

SITC(Rev.1) Codes	Description of materials	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
242	Logs, poles, posts, piling etc.	236.6	2228.1	1170.8	675.8	310.2	107.9	1211.7	370.0	178.4	201.1	12.1
243	Timber all sorts	2075.6	2810.0	3310.8	4873.2	3526.6	4137.9	6986.7	7679.6	9786.1	8662.5	8602.7
273.1	Building and monumental stone	171.8	320.6	341.6	372.6	108.1	210.6	500.1	280.0	270.9	614.9	409.8
273.2	Gypsum and plasters	1.6	7.5	3.2	10.6	46.9	9.7	48.7	3.5	19.6	88.3	180.4
273.2(2)	Limestone and other stones for cement manufacture	1.5	23.8	-	3.0	16.6	43.3	30.9	7.2	103.3	5.8	5.5
273.3	Sand	4.3	6.4	6.6	4.1	3.8	0.7	6.7	22.2	68.9	217.4	49.8
273.4	Gravel and crushed stone	36.7	21.7	16.7	12.8	45.8	5.7	43.0	1336.0	1210.9	103.2	112.5
332.9	Asphalt, bitumen etc.	160.9	1697.0	572.7	1029.8	659.1	1180.3	4969.4	9342.3	2799.1	4395.6	4382.9
533.3	Paints, enamels, lacquers, varnishes etc.,	593.8	1293.0	1728.5	1922.0	2071.4	6164.9	2371.8	2951.0	3964.3	4883.3	5133.8
631.2	Plywood	860.9	1716.1	2297.2	2388.6	2561.4	3493.3	4016.8	6628.9	7931.4	7990.0	6871.5
631.4	Hardboard etc.,	349.5	279.9	143.5	429.9	233.4	197.3	588.8	294.2	393.1	646.5	425.8
632.4	Building materials made of wood	274.1	606.3	2245.2	722.8	639.8	514.8	781.0	253.9	522.1	-	-
657.4	Linoleum and other floor coverings	24.7	34.9	10.5	-	-	22.2	10.9	245.4	470.8	1153.8	256.8
661.1	Lime	301.2	200.0	122.9	55.4	43.1	67.6	82.0	290.6	164.2	408.4	233.9
661.2	Cement	4305.7	7355.8	6878.8	9525.9	15552.8	13599.7	18509.8	24756.0	30148.5	29680.8	22348.7
661.8	Building materials (asbestos)	948.4	689.5	380.5	858.2	583.4	1052.1	1579.7	3550.0	3462.3	4953.5	8514.5
662.4	Bricks, tiles of ceramic	487.2	1501.7	1165.8	1869.4	1231.6	1041.0	1195.3	1993.1	3036.0	3926.7	5641.7
664.4	Wired and sheet glass	31.6	69.8	6.0	11.8	53.7	7.6	19.1	23.6	1.0	20.4	17.1
664.6	Bricks, tiles glass	-	-	-	-	35.6	51.3	111.0	317.6	284.5	387.4	190.9
664.7	Safety glass	3.3	27.0	-	59.4	66.8	68.1	120.6	339.4	295.6	467.7	589.3
664.9	Glass n.e.s.	52.9	15.6	4.6	296.7	286.6	344.3	708.2	514.9	820.9	945.7	804.5
673	Iron and steel bars, rods etc.,	2928.5	5103.5	3973.0	6195.1	4102.2	7887.7	8603.8	13835.7	15243.3	14053.9	19154.8
674	Iron and steel plates, sheets	489.1	654.0	1615.0	1453.8	614.6	1225.4	2007.9	2030.8	3183.2	3615.3	4601.1
677	Iron and steel wire	64.7	118.9	71.5	179.1	270.9	382.2	373.6	335.9	389.1	927.1	528.9
678.1	Cast iron pipes, tubes and fittings	369.1	6479.5	1251.2	460.8	579.8	1169.0	2943.6	5782.8	20614.0	14046.7	30084.5
678.2	Iron and steel pipes, tubes and fittings	1543.9	2243.1	750.8	1539.8	1420.9	1899.4	8329.2	21229.3	17150.8	9199.8	4211.5
682.2	Copper bars, rods, sheets, wire etc.,	223.8	117.4	175.5	188.6	160.8	158.3	264.4	412.3	283.9	284.3	-
684.2	Aluminium bars, rods, sheets etc.,	333.8	148.4	35.8	14.1	536.4	615.9	820.1	1462.6	1472.1	1968.2	1205.7
691.1	Fabricated and finished iron and steel building materials and structures	1010.6	2395.0	1613.3	2779.4	3023.5	4465.3	3107.9	7840.3	17119.6	10494.8	19632.1
691.2	Fabricated and finished aluminium building materials and structures	1356.1	1916.7	625.0	2120.6	1599.4	1153.8	1656.6	1439.4	2087.2	3614.9	4976.8
693.1	Wire ropes, cables w/o insulation	75.2	173.7	51.4	22.7	49.7	114.0	194.2	361.9	348.9	225.8	586.1
693.2	All types of fencing wire	367.6	829.3	648.1	1038.0	914.3	912.9	1367.5	1453.0	1955.0	1223.5	1584.8
694	Miscellaneous builders hardware	1318.6	620.5	547.9	796.0	1233.1	869.0	896.1	1594.2	1728.9	1806.6	1669.5
718.4	Construction machinery	8779.2	13637.4	5201.3	10419.0	5181.0	7728.7	9420.7	24811.7	24224.8	39742.0	32139.0
723.1	Insulated electric wires and cables	1707.1	3063.1	1996.9	1586.6	1838.5	2743.0	7030.4	8793.7	9218.0	9132.1	12610.5
723.2	All electric insulating materials	3217.6	1608.8	1764.4	934.0	1443.6	1512.0	3211.6	2220.0	2851.3	2831.8	1899.3
812.2	Sinks, wash basins etc. (ceramic)	529.4	1137.6	1208.4	1313.6	1454.2	1502.1	1351.9	2383.7	3412.0	3876.5	4288.1
812.3	Sinks, wash basins etc. (iron or steel)	157.9	141.8	46.9	34.6	77.9	227.2	457.9	717.3	5411.1	-	-
812.4	Lighting fixtures and fittings	358.9	442.5	104.1	71.6	418.8	469.0	1347.6	2125.7	3043.0	3391.5	4058.8
	Total	35777.0	61736.0	42086.4	56259.4	52996.3	63355.2	96377.2	160029.7	195668.1	190187.8	208015.7

Source: Statistical Year Book, 1985.

* For more detailed description of materials refer to Standard International Trade Classification.

Table 52. Quantity of recorded imports of selected construction materials during 1977-1984

(Value in thousands Omani Rial)

SITC(Rev.1) Codes	Description of materials**	1977	1978	1979	1980	1981	1982	1983	1984
242	Logs, poles, posts, piling etc.	5050.9	2091.0	457.8	6922.4	3157.8	1269.4	1514.7	28.0
243	Timber all sorts	50188.7	44642.4	44008.4	61219.7	68491.4	116092.9	99699.5	137232.7
273.1	Building and monumental stone	950.7	1319.7	1205.3	2401.8	893.0	831.6	3205.3	2162.1
273.2	Gypsum and plasters	59.3	1100.3	212.0	250.2	16.3	109.8	6351.0	10765.3
273.2(2)	Limestone and other stones for cement manufacture	6.8	342.3	830.6	1429.9	668.3	1586.6	99.1	111.4
273.3	Sand	97.0	38.8	21.8	159.0	448.3	844.2	1557.5	380.4
273.4	Gravel and crushed stone	75.2	508.1	109.6	820.7	15643.7	16724.2	904.7	972.9
332.9	Asphalt, bitumen etc.	33484.3	18096.6	19174.7	44684.4	100374.5	24377.4	41570.5	44026.1
533.3	Paints, enamels, lacquers, varnishes etc.,	6086.7	5935.6	6096.0	5995.6	7947.0	11067.3	14564.1	17608.4
631.2	Plywood	17422.8	16274.3	17305.8	18713.7	36425.7	433357.6	45240.0	42578.4
631.4	Hardboard etc.,	1667.0	1428.9	1222.2	8921.8	2193.2	1523.5	5849.6	4316.4
632.4	Building materials made of wood	1076.8	2308.3	1527.8	1531.6	368.9	872.6	-	-
657.4	Linoleum and other floor coverings	-	-	112.2	20.8	910.5	1418.2	768.2	483.7
661.1	Lime	1326.7	607.2	1173.3	1478.0	3506.7	2503.7	7689.0	3785.6
661.2	Cement	392248.1	615803.0	522674.9	685093.6	833791.8	1004363.9	1280205.1	1008784.7
661.8	Building materials (asbestos)	4356.9	2200.0	4750.8	6066.8	9860.0	10598.4	52502.0	39142.8
662.4	Bricks, tiles of ceramic	14109.1	7923.7	5037.8	3861.2	8187.8	11950.9	17855.9	26979.2
664.4	Wired and sheet glass	114.6	305.8	21.6	95.5	128.3	0.1	65.8	21.9
664.6	Bricks, tiles glass	-	181.9	261.3	248.0	760.3	1013.0	2126.6	1070.5
664.7	Safety glass	289.8	284.3	146.8	188.1	993.6	1402.3	1972.0	3021.5
664.9	Glass n.e.s.	1455.6	894.9	1480.8	1913.1	1142.4	1470.6	1583.7	2928.7
673	Iron and steel bars, rods etc.,	40197.3	37166.3	60262.2	58012.8	96923.6	162881.9	145033.2	197980.5
674	Iron and steel plates, sheets	9704.2	5053.1	8399.1	10717.1	10985.7	17880.9	21068.2	29137.3
677	Iron and steel wire	386.4	1303.0	971.7	1209.0	1096.4	1196.9	2784.0	1559.0
678.1	Cast iron pipes, tubes and fittings	3259.5	3119.6	5168.6	3248.2	16413.5	33662.9	55373.7	148403.3
678.2	Iron and steel pipes, tubes and fittings	6024.9	5415.0	6298.8	27058.0	66698.9	46106.4	31952.7	17068.2
682.2	Copper bars, rods, sheets, wire etc.,	188.7	132.2	144.3	161.2	378.0	242.9	227.6	-
684.2	Aluminium bars, rods, sheets etc.,	9.8	743.9	488.6	1414.8	1559.3	1574.0	2486.6	1142.9
691.1	Fabricated and finished iron and steel building materials and structures	7627.0	7846.1	13128.2	6563.3	14270.5	18833.8	18336.1	46686.1
691.2	Fabricated and finished aluminium building materials and structures	2490.3	1653.7	1239.7	1848.1	1589.8	2059.3	5157.2	6786.5
693.1	Wire ropes, cables w/o insulation	47.0	136.8	195.2	385.0	924.7	587.6	763.5	2128.4
693.2	All types of fencing wire	5113.4	3039.8	3253.3	4728.2	4975.8	7364.8	3961.5	4325.9
694	Miscellaneous builders hardware	2625.2	3339.3	1705.0	1340.9	3425.3	3188.0	4091.3	4348.9
718.4	Construction machinery	12285.3	3576.1	5482.3	3785.0	9577.2	10313.2	20906.4	17038.5
723.1	Insulated electric wires and cables	2755.8	3847.2	2925.3	7753.3	10253.6	12523.9	13158.1	18650.7
723.2	All electric insulating materials	1806.5	1182.1	936.8	1644.5	2202.7	1936.1	2120.9	2527.5
812.2	Sinks, wash basins etc. (ceramic)	1893.1	1676.0	1579.1	1322.6	2370.7	4596.4	4533.4	4806.2
812.3	Sinks, wash basins etc. (iron or steel)	38.1	83.7	341.6	421.0	690.7	444.8	-	-
812.4	Lighting fixtures and fittings	82.7	240.6	304.2	568.5	1287.9	1489.8	1569.0	1790.8
	Total	626602.2	801841.0	740655.4	984197.4	1341533.8	1580261.8	1891857.7	1850781.4

Source: Statistical Year Book, 1985.

* Data on quantities available only from 1977.
** For more detailed description of materials refer to Standard International Trade Classification.
Note: Details on quantities were available from 1977 only.

F. Concluding remarks

Oman, in spite of rapid progress and an average per capital GDP of $6,250, is still more underdeveloped with its present infrastructure, physical and human, than other countries with a similar per capital income level.[1/] The well-established and dynamic government institutions, the overall education efforts and the diversification of economic activity are very promising, however the fluctuation and decreasing oil prices have an adverse effect on Oman's development process and currently some of the important projects have had to be postponed. The first university educational programme which was started recently, will have a long-term positive effect on the development of human resources. Government policy to increase Omani labour by replacing expatriates in many sectors seems to be more operational given the increasing financial difficulties and problems in the balance of payments.

The land policy of the Omani Government provided, and keeps on providing, Omani citizens with easy access to housing and to economic activities in commerce, industry and agriculture. The land allocation system also works as a tool for better income distribution. The densities of settlements, however, have to increase, owing to the limited amount of land which is good for both agricultural uses and housing. This trend will gradually develop in other towns, as it has already become significant in the capital area.

The physical planning studies have been quite well organized and almost all the settlements have been provided with development plans. The centralized procedures of planning, all in the Ministry of Housing, may be decentralized to some extent to regional and local authorities (to municipalities) in the future, parallel to the increasing educational capacity and better staffing of the local authorities. The capital area has already been provided with a very efficient road network and adequate infrastructure, and may absorb higher levels of population without major problems. The generally accepted national policies of restricting growth of the primate centres may not be applicable to Oman. For the present and near future, limiting the growth of the capital area in Oman should not be a problem, since there are still sufficient and underutilized capacities in many sectors so that urban growth can proceed efficiently.

The housing situation has progressed significantly in Oman within the last decade; however, since there are limited data, it is not possible to evaluate this progress quantitatively. The housing stock in the capital area in particular seems to meet the current need. The decrease in the expatriate population has helped to fill the housing shortage. There are currently quite a number of vacant flats and office space in the capital area, and it seems this trend will continue in the near future.

1/ World Bank, Oman, Recent Economic Developments and Prospects 1985, p. i.

The housing units constructed by the public sector seem more costly than private housing construction. The Government should seek to find ways to reduce the cost of constructing public housing. On the other hand, both the government and private housing units should be designed and constructed with more energy-efficient techniques and materials since cooling is a serious problem and costs considerable amounts. Another measure for the reduction of both the initial construction and the cooling costs for housing units is the reduction of the average size of units. This is possible without compromising too much the comfort level of the units thanks to better and more efficient designs. The housing finance systems, especially through the Oman Housing Bank, are functioning efficiently.

The legalization of condominium sales in Oman will give a new impetus to the housing market. It may be expected that first, it will increase occupation of currently vacant flats and office space, and secondly, will lead to changes in the housing production systems in the long run. The realization of the first population and housing census in the near future the systematic conducting of periodic censuses afterwards will be a basic source of material for housing research and will substantively contribute to the formulation of housing policies.

The progress in the infrastructural facilities in Oman within the past 15 years is remarkable. The basic networks of highways, ports, communications and power have been completed to a great extent. The provision of water and sewerage facilities are behind compared with other infrastructure sectors. Water schemes, however, are taking priority over other investments in the power sector in the current development policies of the Government. The 1986-1990 Five Year Plan has envisaged a series of major power projects which had to be rescheduled officials have stated that during the coming period of economic slow-down the demand for power is not expected to rise, and power investments may be postponed.[1/] The power station projects at Manah near Nizwa, and a larger power and desalination plant at Barka however, seem to be proceeding. The plant in Barka is projected to have a power capacity of 700 MW and, a daily desalination capacity of 18,000 cubic metres. The Government is planning to build a system of acquifer recharge dams. The project comprises 58 such dams of which 4 have already been built.

The construction sector in Oman, as in other developing countries, has been playing a locomotive role in the economy, especially in employment. The employment estimates and available figures for expatriate labour do not match, and the actual number of persons involved in construction activities should be higher than the estimated figures.

The current decrease in expatriate labour will substantially affect the employment figures in the construction sector. The share of construction investments in total fixed capital formation in Oman is about 25 per cent annually, which is quite low. This may be due to calculation techniques and definitions used. The Government's policy to support national construction companies has been quite effective in the development of local contracting capacity. The local construction companies are rapidly developing their skill

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1/ Middle East Economic Digest special report on Oman, September 1986, p. 25.

and experience, especially in the housing sector. Since Oman has considerable deposits, production of gypsum and materials made of asbestos may have prospects in the regional context.

Oman is progressing towards self-sufficiency in cement production. Recently many items of construction materials have been produced in Oman with varying quality and quantities and a part of the local demand is met through local manufacturing. However, the import need for many of the items presently imported will continue into the future.

Annex I. Oman population 10 years and over by age, sex and marital status, 1977-1979

Age group	Single	Married	Divorced	Widowed	Total
Male					
10 - 14	99.5	0.5	0.0	0.0	100.0
15 - 19	84.3	15.1	0.3	0.3	100.0
20 - 24	33.9	62.3	3.6	0.2	100.0
25 - 29	11.0	85.9	2.6	0.5	100.0
30 - 34	5.1	91.7	2.0	1.2	100.0
35 - 39	3.2	93.2	3.1	0.5	100.0
40 - 44	2.6	93.1	2.6	1.7	100.0
45 - 49	0.5	94.3	1.8	3.4	100.0
50 - 54	1.4	89.9	3.3	5.4	100.0
55 - 59	3.3	88.6	2.9	5.2	100.0
60 - 64	1.6	87.7	3.6	7.1	100.0
65 - 69	0.0	84.0	5.9	10.1	100.0
70 - 74	3.3	83.5	2.3	10.9	100.0
75 and over	2.7	76.5	2.9	17.9	100.0
20 and over	12.4	82.8	2.4	2.4	100.0
Female					
10 - 14	92.0	0.1	7.9	0.0	100.0
15 - 19	27.3	69.5	2.8	0.4	100.0
20 - 24	6.5	90.9	2.0	0.6	100.0
25 - 29	2.4	92.2	4.4	1.0	100.0
30 - 34	1.1	92.9	3.7	2.3	100.0
35 - 39	0.5	89.9	3.3	6.3	100.0
40 - 44	1.3	81.8	4.5	13.3	100.0
45 - 49	0.3	71.7	6.3	21.7	100.0
50 - 54	0.9	53.4	7.9	37.8	100.0
55 - 59	0.5	49.4	10.6	39.5	100.0
60 - 64	0.4	33.3	8.3	58.0	100.0
65 - 69	0.0	30.8	8.4	60.8	100.0
70 - 74	0.8	15.8	4.9	78.5	100.0
75 and over	0.0	12.3	5.3	82.4	100.0
20 and over	2.1	76.3	4.7	16.9	100.0

Source: Oman, Socio-Demographic Survey in Eleven towns (unpublished results) and The Population Situation.

Annex II. Number of schools, institutions and classes by level and type of education and sex 1984/1985

Type of education	Level of education	Sex	Government: Number of schools	Government: Number of classes	Private: Number of schools	Private: Number of classes	Total: Number of schools	Total: Number of classes
General education	Kindergarten (I) Kindergarten (II)	Mixed	-	-	10	69	10	69
	Primary	Male	101	1,977	-	-	101	1977
		Female	104	1,581	-	-	104	1,581
		Mixed	103	1,017	20	85	123	1,102
		Total	308	4,575	20	85	328	4,660
	Preparatory	Male	91	569	-	-	91	569
		Female	43	336	-	-	43	336
		Mixed	61	227	-	6	61	233
		Total	195	1,132	-	6	195	1,138
	Secondary	Male	19	213	-	-	19	213
		Female	19	120	-	-	19	120
		Mixed	-	-	1	4	1	4
		Total	38	333	1	4	39	337
Model preparatory	preparatory	Male	1	6	-	-	1	6
		Female	1	9	-	-	1	9
		Total	2	15	-	-	2	15
Mosques religious	Preparatory	Male	7	27	-	-	7	27
Islamic secondary	Secondary	Male	1	11	-	-	1	11
Intermediate teacher's training M/F	Secondary	Male	2	16	-	-	2	16
		Female	2	14	-	-	2	14
		Total	4	30	-	-	4	30

Annex II. (Cont'd)

Type of education	Level of education	Sex	Government		Private		Total	
			Number of schools	Number of classes	Number of schools	Number of classes	Number of schools	Number of classes
Commercial Secondary	Preparatory	Male	1	10	–	–	1	10
		Female	1	6	–	–	1	6
		Total	2	16	–	–	1	16
Agricultural Secondary	Secondary	Male	1	6	–	–	1	6
Industrial Secondary	Secondary	Male	1	4	–	–	1	4
Vocational training	Preparatory	Male	9	116	–	–	9	116
Vocational training	Two years after secondary	Mixed	1	4	–	–	1	4
Institute of sciences	After Secondary	Mixed	1	10	–	–	1	10
Institute of bankers	After Secondary	Mixed	1	5	–	–	1	5
Special education	Secondary	Mixed	2	13	–	–	2	13
		Total	2	13	–	–	2	13
		Male	234	2955	–	–	234	2955
		Female	170	2066	–		170	2066
		Mixed	169	1276	31	164	200	1440
Total		Total	573	6297	31	164	604	6461

Source: Statistical Year Book, 1985.

Annex III. Number of students in schools and institutions, by sex, level and type of education 1981-1985

Type of education	Level of education	Sex	Government	Private	Total
	Kindergarten (I)	Male	-	879	879
	Kindergarten (II)	Female	-	764	764
		Total	-	1643	1643
General education	Primary	Male	89492	900	90392
		Female	65897	658	66555
		Total	155389	1558	156947
	Preparatory	Male	19190	90	19280
		Female	9124	36	9160
		Total	28314	126	28440
	Secondary	Male	6208	46	6254
		Female	2943	26	2969
		Total	9151	72	9223
Model preparatory	Preparatory	Male	142	-	142
		Female	299	-	299
		Total	441	-	441
Mosques religious	Preparatory	Male	435	-	435
Islamic secondary	Secondary	Male	305	-	305
Intermediate teacher's training M/F	Secondary	Male	354	-	354
		Female	304	-	304
		Total	658	-	658
Commercial secondary	Secondary	Male	247	-	247
		Female	98	-	98
		Total	345	-	345

Annex III. (Cont'd)

Type of education	Level of education	Sex	Government	Private	Total
Agricultural secondary	Secondary	Male	118	-	118
Industrial secondary	Secondary	Male	125	-	125
Vocational training	Preparatory	Male	1490	-	1490
Vocational training	Two years after secondary	Male	97	-	97
Institute of health	After secondary	Male	86	-	86
		Female	83	-	83
		Total	169	-	169
Institute of bankers	After secondary	Male	46	-	46
		Female	44	-	44
		Total	90	-	90
Special education	Secondary	Male	76	-	76
		Female	43	-	43
		Total	119	-	119
		Male	118411	1915	120326
		Female	78835	1484	80319
Grand total		Total	197246	3399	200645

Source: Statistical Year Book, 1985.

Annex IV. Staff in schools and institutions, by sex, level and type of education 1984-1985

			Government			Private		
Type of education	Level of education	Sex	Number of teachers	Number of administrators	Total of administrators	Number of teachers	Number of administrators	Number of administrators
	Kindergarten (I)	Male	-	-	-	-	-	-
	Kindergarten (II)	Female	-	-	-	71	10	81
		Total	-	-	-	71	10	81
General education	Primary	Male	3236	210	3446	4	12	16
		Female	2133	116	2249	103	6	109
		Total	5369	326	5695	107	18	125
	Preparatory	Male	1410	245	1655	9	-	9
		Female	644	95	739	3	-	3
		Total	2054	340	2394	12	-	12
	Secondary	Male	402	70	472	6	1	7
		Female	239	38	277	7	4	11
		Total	641	108	749	13	5	18
Model preparatory	Preparatory	Male	16	8	24	-	-	-
		Female	24	10	34	-	-	-
		Total	40	18	58	-	-	-
Mosques religious	Secondary	Male	68	9	77	-	-	-
Islamic secondary	Secondary	Male	25	6	31	-	-	-
Intermediate teacher's training colleges M/F	Secondary	Male	52	14	66	-	-	-
		Female	40	11	51	-	-	-
		Total	92	25	117	-	-	-

Annex IV. (Cont'd)

Type of education	Level of education	Sex	Government: Number of teachers	Government: Number of administrators	Government: Total of administrators	Private: Number of teachers	Private: Number of administrators	Private: Number of administrators
Commercial secondary	Secondary	Male	23	4	27	–	–	–
		Female	17	2	19	–	–	–
		Total	40	6	46	–	–	–
Agricultural secondary	Preparatory	Male	15	16	31	–	–	–
Industrial secondary	Secondary	Male	12	4	16	–	–	–
Vocational training	Preparatory	Male	319	150	469	–	–	–
Vocational training	Two years after secondary	Male	11	6	17	–	–	–
Institute of health	After secondary	Male	10	6	16	–	–	–
		Female	28	2	30	–	–	–
		Total	38	8	46	–	–	–
Institute of bankers	After secondary	Male	5	3	8	–	–	–
		Female	–	–	–	–	–	–
		Total	5	3	8	–	–	–
Special education		Male	3	–	3	–	–	–
		Female	15	4	19	–	–	–
		Total	18	4	22	–	–	–
Total		Male	5,607	751	6,358	19	13	32
		Female	3,140	278	3,418	184	20	204
		Total	8,747	1,029	9,776	203	33	236

Source: Statistical Year Book, 1985.

Annex V. Government schools by educational regions during 1984-1985

Educational regions	Primary schools				Preparatory schools				Secondary schools			Total			
	Male	Female	Co-education-tion	Total	Male	Female	Co-educational-tion	Total	Male	Female	Total	Male	Female	Co-educa-tion	Total
Capital	17	18	5	40	15	9	6	30	1	1	2	33	28	11	72
Southern	21	4	25	50	12	6	13	31	1	1	2	34	11	38	83
Batinah	22	24	11	57	21	9	2	32	1	2	3	44	35	13	92
Rostaq	11	21	18	50	7	1	7	15	3	3	6	21	25	25	71
Interior	16	17	3	36	10	2	8	20	6	5	11	32	24	11	67
Dhahirah	5	6	16	27	9	6	12	27	2	2	4	16	14	28	58
Eastern	4	5	7	16	8	6	7	21	1	1	2	13	12	14	39
Al-Wosta	4	9	14	27	7	1	6	14	2	3	5	13	13	20	46
Musandam	1	-	4	5	2	3	-	5	2	1	3	5	4	4	13
Total	101	104	103	308	91	43	61	195	19	19	38	211	166	164	541

Source: Statistical Year Book, 1985.

Annex VI. Labour cards issued by the Ministry of Social Affairs and Labour to Non-Omanis working in the private sector classified by major economic activities during 1980 to 1984

ISIC Code	Economic activity	Number of labour cards					Percentage of the total				
		1980	1981	1982	1983	1984	1980	1981	1982	1983	1984
1	Agriculture and fishing	4655	6988	6583	8921	9360	3.51	4.26	3.52	3.79	3.47
2	Mining and quarrying	2272	2682	3426	3399	3460	1.71	1.64	1.83	1.44	1.28
3	Manufacturing	3876	8096	8034	9477	5558	2.92	4.94	4.30	4.02	2.01
4	Electricity, gas and water	723	478	423	195	185	0.55	0.29	0.23	0.08	0.02
5	Construction	33393	48532	46279	59022	64441	25.18	29.60	24.77	25.05	23.91
61/62	Wholesale and retail trade	43693	23692	31703	37171	59462	32.95	14.45	16.97	15.77	22.02
5/61/62	Construction and trade combined	26548	49407	66611	89793	99694	20.02	30.14	35.66	38.11	37.00
63	Restaurants and hotels	1518	1843	2037	3017	2575	1.14	1.12	1.09	1.28	0.96
7	Transport, storage and communication	2852	2258	2483	2545	2716	2.15	1.38	1.33	1.08	1.01
8	Financing, insurance, real estate and business services	3033	2485	3272	3753	4499	2.29	1.52	1.75	1.59	1.67
9	Community, social and personal services	2060	8088	8139	10606	10212	1.55	4.93	4.36	4.50	3.79
X	More than one activity	3678	9066	7345	7478	6824	2.77	5.53	3.93	3.17	2.53
0	Activity not stated	4317	319	486	268	417	3.26	0.19	0.26	0.11	0.15
	Total - all activities	132618	163934	186821	235645	269410	100.0	100.0	100.0	100.0	100.0
Less:	Number of active labour cardholders who left Oman	2023	3427	9508	4283	4405	-	-	-	-	-
	Net total	130595	160507	177313	231362	265005	-	-	-	-	-

Source: Statistical Year Book, 1985.

Annex VII. Number of Labour cards issued in 1984 by the Ministry of Social Affairs and Labour to Non-Omanis working in the private sector classified by major occupational groups and nationalities

ISCO Code	Occupational groups	Nationalities						Not stated	Grand Total
		Arabs	Asians	Africans	Europeans	Americans	Others		
0 1	(Professional, technical and related workers)	690 482	7,709 4,397	21 8	3,377 286	252 20	84 8	25 8	12,158 5,209
	Total 0/1	1,172	12,106	29	3,663	272	92	33	17,367
2	Administrative and managerial workers	366	1,692	9	568	52	15	2	2,704
3	Clerical and related workers	275	11,599	8	172	14	4	8	12,080
4	Sales workers	308	18,635	11	278	21	5	28	19286
5	Service workers	150	23,308	13	56	3	-	28	23558
6	Agriculture, animal husbandry workers and fishermen	296	12,448	1	8	1	-	15	12769
7	(Production and related workers,	260	15,452	2	584	36	7	18	16359
8 9	Transport equipment operators and Labourers)	187 328	41,567 122,313	2 5	57 56	9 7	3 1	42 114	41,867 122,824
	Total 7/8/9	775	179,332	9	697	52	11	174	181,050
	Total (0 - 9)	3,342	259,120	80	5,442	415	127	288	26,8814
	Not stated	16	531	-	26	2	-	21	596
	Grand Total	3,358	259,651	80	5,468	417	127	309	269,410*
	Percentage	1.25	36.38	0.03	2.03	0.15	0.05	0.11	100.0

Source: Oman, Statistical Year Book, 1985.

* Including 4405 employees who left Oman during 1984.

Annex VIII. Distribution of gross fixed capital formation by type of economic activity 1980-1984 at current prices (millions of Omani rial)

Sectors	1980 Public	1980 Private	1980 Total	1981 Public	1981 Private	1981 Total	1982 Public	1982 Private	1982 Total	1983 Public	1983 Private	1983 Total	1984 Public	1984 Private	1984 Total
A. Goods producing sectors															
1. a. P.D.O. development expenditure	77.8	52.0	129.8	76.4	48.6	125.0	106.2	70.8	177.0	86.4	61.0	147.4	90.7	60.5	151.2
b. Other oil projects	-	21.0	21.0	0.3	49.7	50.0	0.6	55.1	55.7	0.4	37.0	37.4	0.4	71.3	71.7
2. Natural gas	4.8	-	4.8	7.5	-	7.5	1.1	-	1.1	5.1	-	5.1	9.7	-	9.7
3. Mining and quarrying	9.8	-	9.8	20.3	-	20.3	26.6	-	26.6	11.7	-	11.7	3.6	-	3.6
4. Agriculture	4.3	3.5	7.8	5.2	4.6	9.8	6.0	3.5	9.5	5.0	5.3	10.3	8.4	8.1	16.5
5. Fishing	1.9	0.7	2.6	1.3	0.7	2.0	1.2	0.9	2.1	1.1	1.0	2.1	1.8	1.0	2.8
6. Manufacturing	6.7	15.7	22.4	31.2	19.0	50.2	25.6	18.2	43.8	10.5	20.8	31.3	2.4	20.4	22.8
7. Contracting agency	-	3.6	3.6	-	5.7	5.7	-	10.3	10.3	-	9.1	9.1	-	16.9	16.9
8. Total (1 to 7)	105.3	96.5	201.8	142.2	128.3	270.5	167.3	158.8	326.1	120.2	134.2	254.4	147.0	178.2	295.2
B. Services sectors															
9. Housing	3.8	56.4	60.2	4.2	57.8	62.0	20.4	53.0	73.4	25.6	59.4	85.0	23.2	56.3	79.5
10. Trade and tourism	0.4	2.5	2.9	7.4	3.4	10.8	8.9	8.3	17.2	25.5	8.2	33.7	36.2	12.0	48.2
11. Electricity	19.5	-	19.5	19.6	-	19.6	35.0	-	35.0	34.4	-	34.4	33.9	-	33.9
12. Water	5.4	-	5.4	13.1	-	13.1	16.0	-	16.0	14.0	-	14.0	15.6	-	15.6
13. Post, telegraph & telephone	2.4	-	2.4	2.0	-	2.0	4.4	-	4.4	14.0	-	14.0	32.7	-	32.7
14. Financial institutions	-	3.0	3.0	-	2.7	2.7	-	2.0	2.0	-	3.0	3.0	-	10.3	10.3
15. Transport	-	1.5	1.5	-	1.7	1.7	-	2.4	2.4	-	2.2	2.2	-	3.9	3.9
16. Total (9 to 15)	31.5	63.4	94.9	46.3	65.6	111.9	84.7	65.7	150.4	113.5	72.8	186.3	141.6	82.5	224.1
C. Infrastructure															
17. Irrigation & water resources	1.7	-	1.7	5.2	-	5.2	6.5	-	6.5	6.2	-	6.2	12.0	-	12.0
18. Roads	45.8	-	45.8	66.8	-	66.8	44.0	-	44.0	42.7	-	42.7	47.3	-	47.3
19. Ports	9.2	-	9.2	3.5	-	3.5	6.1	-	6.1	4.0	-	4.0	1.6	-	1.6
20. Airports	5.2	-	5.2	2.2	-	2.2	1.4	-	1.4	1.4	-	1.4	3.5	-	3.5
21. Town planning & municipal services	17.2	-	17.2	19.1	-	19.1	16.7	-	16.7	14.8	-	14.8	22.1	-	22.1
22. Education	5.4	-	5.4	9.4	-	9.4	35.6	-	35.6	29.3	-	29.3	41.5	-	41.5
23. Vocational training	3.2	-	3.2	2.7	-	2.7	6.0	-	6.0	7.6	-	7.6	6.9	-	6.9
24. Health	4.1	-	4.1	5.9	-	5.9	5.9	-	5.9	11.9	-	11.9	21.9	-	21.9
25. Information & culture & Religious services	5.9	-	5.9	3.1	-	3.1	9.8	-	9.8	13.3	-	13.3	21.9	-	21.9
26. Social services	1.9	-	1.9	2.1	-	2.1	2.1	-	2.1	3.4	-	3.4	3.2	-	3.2
27. Government administration*	69.4	-	69.4	81.1	-	81.1	96.1	-	96.1	161.6	-	161.6	202.5	-	202.5
28. Total (17 to 27)	169.0	-	169.0	201.1	-	201.1	230.2	-	230.2	296.2	-	296.2	384.4	-	384.4
29. Total (7+15+27)	305.8	159.9	465.7	389.6	193.9	583.5	482.2	224.5	706.7	529.9	207.0	736.9	643.0	260.7	903.7

Source: Statistical Year Book, 1985.

* Including capital expenditures of civil nature carried out by Defence and National Security.

Annex IX. Distribution of gross fixed capital formation by type of economic activity 1980-1984 with relative shares (percentage) and current prices

Sectors	1980			1981			1982			1983			1984		
	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total
A. Goods producing sectors															
1. a. P.D.O. development expenditure	25.44	32.52	27.87	19.61	25.07	21.42	22.02	31.54	25.05	16.31	29.47	20.00	14.11	23.21	16.73
b. Other oil projects	-	13.13	4.51	0.08	25.63	8.57	0.12	24.54	7.88	0.07	17.87	5.08	0.06	27.35	7.94
2. Natural gas	1.57	-	1.03	1.92	-	1.29	0.23	-	0.16	0.96	-	0.69	1.51	-	1.07
3. Mining and quarrying	3.20	-	2.10	5.21	-	3.48	5.52	-	3.76	2.21	-	1.59	0.56	-	0.40
4. Agriculture	1.41	2.19	1.68	1.33	2.37	1.68	1.24	1.56	1.34	0.94	2.56	1.40	1.31	3.11	1.83
5. Fishing	0.62	0.44	0.56	0.34	9.80	0.34	0.25	0.40	0.30	0.21	0.48	0.28	0.28	0.38	0.31
6. Manufacturing	2.19	9.82	4.81	8.01	9.30	8.60	5.31	8.11	6.20	1.98	10.05	4.25	0.37	7.82	2.52
7. Contracting agency	-	2.25	0.77	-	2.94	0.98	-	4.59	1.46	-	4.40	1.23	-	6.48	1.87
8. Total (1 to 7)	34.43	60.55	43.33	36.50	66.17	46.36	34.69	70.74	46.15	22.68	64.83	34.52	18.30	68.35	32.67
B. Services sectors															
9. Housing	1.24	35.27	12.93	1.08	29.81	10.63	4.23	23.60	10.39	4.83	28.70	11.53	3.61	21.60	8.80
10. Trade and Tourism	0.13	1.56	0.62	1.90	1.75	1.85	1.85	3.70	2.43	4.82	3.96	4.57	5.63	4.60	5.33
11. Electricity	6.38	-	4.18	5.03	-	3.36	7.26	-	4.95	6.49	-	4.67	5.27	-	3.75
12. Water	1.77	-	1.16	3.36	-	2.25	3.32	-	2.26	2.64	-	1.90	2.43	-	1.73
13. Post, telegraph & telephone	0.78	-	0.52	0.51	-	0.34	0.91	-	0.52	2.64	-	1.90	5.08	-	3.62
14. Financial institutions	-	1.88	0.65	-	1.39	0.46	-	0.89	0.28	-	1.45	0.41	-	3.95	1.14
15. Transport	-	0.94	0.32	-	0.88	0.29	-	1.07	0.34	-	1.06	0.30	-	1.50	0.43
16. Total (9 to 15)	10.30	39.65	20.38	11.88	33.83	19.18	17.57	29.26	21.27	21.42	35.17	25.27	22.02	31.65	24.80
C. Infrastructure															
17. Irrigation & water resources	0.56	-	0.36	1.34	-	0.89	1.35	-	0.92	1.17	-	0.84	1.87	-	1.33
18. Roads	14.98	-	9.83	17.15	-	11.45	9.13	-	6.23	8.06	-	5.79	7.36	-	5.23
19. Ports	3.01	-	1.98	0.90	-	0.60	1.27	-	0.96	0.75	-	0.54	0.25	-	0.18
20. Airports	1.70	-	1.12	0.57	-	0.38	0.29	-	0.20	0.27	-	0.19	0.54	-	0.39
21. Town planning & municipal Services	5.62	-	3.69	4.93	-	3.27	3.46	-	2.36	2.79	-	2.01	3.44	-	2.45
22. Education	1.77	-	1.16	2.43	-	1.61	7.38	-	5.04	5.53	-	3.98	6.45	-	4.59
23. Vocational training	1.05	-	0.69	0.69	-	0.46	1.24	-	0.85	1.43	-	1.03	1.07	-	0.76
24. Health	1.34	-	0.88	1.51	-	1.01	1.22	-	0.83	2.25	-	1.62	3.41	-	2.42
25. Information, culture and religious services	1.93	-	1.27	0.80	-	0.53	2.03	-	1.39	2.51	-	1.81	3.41	-	2.42
26. Social services	0.62	-	0.41	0.54	-	0.36	0.44	-	0.30	0.64	-	0.46	0.49	-	0.35
27. Government administration	22.69	-	14.90	20.82	-	13.90	19.93	-	13.60	30.50	-	21.93	31.49	-	22.41
28. Total (17 to 27)	55.27	-	36.29	51.62	-	34.46	47.74	-	33.58	55.90	-	40.19	59.78	-	42.53
29. Total (9+10+27)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Statistical Year Book, 1985.

Annex X. Quantitative development of some sectors (1980-1985)

Items	Unit	1980	1981	1982	1983	1984	1985
Oil production-daily average	000 b/d	282	328	336	389	416	498
Electricity produced							
Capital/area**	m.kW/h	642	784	963	1,168	1,513	1,853
Southern region**	m.kW/h	122	146	174	199	227	275
Water produced							
Capital area**	m. gallons	2,459	2,976	3,557	4,280	4,333	6,364
Southern region**	m. gallons	542	615	934	1,013	1,349	1,518
Asphalted roads	kilometre	2,173	2,835	2,875	3,222	3,308	3,830
Graded roads	kilometre	14,703	16,276	18,123	18,667	19,338	18,280
Telephone lines installed	number	15,044	17,286	19,642	21,370	23,391	41,320
Government schools and institutions	number	381	417	473	518	561	606
Students	number	107,973	122,143	142,866	166,844	195,400	221,694
Schools and institutes teaching staff	number	5,817	6,745	7,646	8,658	9,236	11,168
Beds in government civil hospitals	number	1,784	1,866	2,041	2,133	2,587	2,839
Vessels entered**							
Mina Qaboos	number	920	1,117	1,373	1,527	1,481	1,580
Mina Raysut	number	218	222	257	285	275	322
Mina Al Fahal	number	540	553	545	412	475	428
Recorded imports*	000 tonnes	1,961	2,590	3,037	2,759	2,853	3,122
Low-cost houses	number	2,188	2,441	2,549	2,967	4,068	5,512
Banks	number	22	25	25	25	25	25
Bank branches	number	144	151	162	175	192	208
Vocational training centres	number	5	5	7	8	9	9
Post offices and sub-post offices	number	43	48	49	50	56	63
Youth clubs	number	46	47	48	48	48	48
Civil servants	number	38,840	43,751	49,809	54,877	6,2043	66,648
Consumer price indices Food, beverages and Tobacco in capital area (July-Dec. 1978 100)	%	119.3	122.7	124.0	118.5	108.8	107.8

Source: Oman, Development Council, Technical Secretariat, Oman, Facts and Figures, 1985, (Directorate General of National Statistics, Muscat, 1986).

* School Year 1969/1970, 1975/1976, 1980/1981, 1981/1982, 1982/1983, 1983/1984 and 1984/1985.

** During the year otherwise figures are as at the end of each year.

Annex XI. Banks licenced to operate in Oman (as at 31st December 1984)

Serial No.	Name of bank	Year of establishment	Authorized offices	Operating offices
I.	Commercial Banks			
A.	Local Banks			
1.	National Bank of Oman Ltd. SAO	1973	49	47
2.	Bank of Oman, Bahrain and Kuwait	1974	19	17
3.	Oman International Bank	1975	20	19
4.	Al Bank Al Ahli Al Omani SAO	1976	7	5
5.	Commercial Bank of Oman SAO	1976	16	16
6.	Union Bank of Oman OSC	1976	8	7
7.	Bank of Oman and the Gulf SAO	1977	2	2
8.	Oman Overseas Trust Bank	1981	2	2
9.	Oman Arab Bank	1973	5	5
B.	Foreign Banks			
1.	British Bank of the Middle East	1948	4	4
2.	Chartered Bank	1968	5	5
3.	Grindlays Bank Limited	1969	5	5
4.	Habib Bank Ltd.	1972	15	15
5.	Habib Bank A.G. Zurich	1973	5	5
6.	Bank of Credit and Commerce Int.	1974	12	12
7.	Bank Melli Iran	1974	1	1
8.	Banque Pari Bas	1975	2	2
9.	Citibank N.A.	1975	2	2
10.	Bank of Baroda	1976	3	3
11.	Bank Saderat Iran	1976	1	1
12.	National Bank of Abu Dhabi	1976	2	2
13.	Banque de Liban et D'Outre Mer Sal	1981	1	1
II.	Specialized Banks			
1.	Oman Development Bank	1977	1	1
2.	Oman Housing Bank OSC	1977	6	6
3.	Oman Bank for agriculture and fisheries	1981	7	7
	Total 25 Banks		200	192

Source: Statistical Year Book, 1985.

Annex XII. <u>Areas under cultivation by region</u>

Region	Total number of wilayats	Total number of holdings	Total area of farms		Total area under cultivation	
			Hectares	%	Hectares	%
Batinah and capital area	9	19,778	46,126	55.3	20,750	50.6
Musandam	3	2,156	1,120	1.3	1,030	2.5
Western Hajar	3	6,336	2,624	3.2	1,955	4.7
Eastern Hajar	3	4,686	1,956	2.3	1,235	3.0
Jau and Buraimi	2	1,980	1,312	1.6	885	2.2
Dhahirah	3	6,094	7,202	8.6	3,303	8.1
Oman interior	8	11,154	14,495	17.4	5,167	12.6
Sharqiya and Ja'alan	9	11,066	5,818	7.0	4,285	10.4
Southern region	1	1,826	2,707	3.3	2,414	5.9
Total	41	65,076	83,360	100.0	41,024	100.0

<u>Source</u>: <u>Statistical Year Book</u>, 1985.

* Results of First Agriculture Sample Survey 1978/1979.

Annex XIII. Plots allotted by Ministry of Housing Affairs in the capital area by plot size 1977-1984

Plot size in square metres	Type of plot															
	Residential								Non-residential							
	1977	1978	1979	1980	1981	1982	1983	1984	1977	1978	1979	1980	1981	1982	1983	1984
Under 100	104	59	69	72	71	41	38	42	3	5	10	29	52	31	56	54
100 - 199	293	265	242	431	674	684	612	450	3	2	31	35	32	23	51	26
200 - 299	162	123	162	214	303	505	520	461	1	1	18	14	27	17	19	20
300 - 399	106	395	580	335	78	112	108	105	2	1	10	22	8	7	11	8
400 - 499	238	246	219	192	28	47	63	46	5	-	6	6	12	15	14	11
500 - 599	33	25	25	41	20	27	21	24	2	3	1	6	3	10	10	8
600 - 699	20	36	38	40	6	10	18	12	-	2	3	3	16	6	12	28
700 - 799	24	14	14	20	8	9	33	5	-	1	-	3	3	9	10	15
800 - 899	22	12	6	16	7	7	5	11	1	-	2	3	-	2	5	3
900 - 999	25	36	44	15	4	5	7	8	5	4	-	2	2	6	3	2
1,000+	88	51	66	88	19	55	71	105	26	12	27	56	24	60	62	79
All sizes	1,115	1,262	1,465	1,464	1,218	1,502	1,496	1,269	48	31	108	179	179	186	253	254

Annex XIII. (Continued)

Plot size in square metres	Mixed								Total all types							
	1977	1978	1979	1980	1981	1982	1983	1984	1977	1978	1979	1980	1981	1982	1983	1984
Under 100	24	8	3	9	24	4	4	6	131	72	82	110	147	76	98	102
100 - 199	44	19	14	20	102	22	12	26	340	286	287	486	808	729	675	502
200 - 299	17	10	9	12	15	25	16	19	180	134	189	240	345	547	555	500
300 - 399	13	5	8	8	18	3	10	9	121	401	598	365	104	122	129	122
400 - 499	6	4	2	6	13	12	9	10	249	250	227	204	53	74	86	67
500 - 599	5	2	3	1	5	5	4	2	40	30	29	48	28	42	35	34
600 - 699	3	1	-	5	9	3	5	7	23	39	41	48	31	19	35	47
700 - 799	3	1	1	3	-	1	3	9	27	16	15	26	11	19	46	29
800 - 899	1	1	-	1	-	1	-	3	24	13	8	20	7	10	10	17
900 - 999	1	5	1	1	2	1	2	-	31	45	45	18	8	12	12	10
1,000+	31	15	18	34	18	17	24	26	145	78	111	178	61	132	157	210
All sizes	148	71	59	100	206	94	89	117	1,311	1,364	1,632	1,743	1,603	1,782	1,838	1,640

Source: Statistical Year Book, 1985.

Annex XIV. Plots alloted by Ministry of Housing Affairs outside capital area by plot size, 1984

	Plot size in square metres											
	Under 100	100-199	200-299	300-399	400-499	500-599	600-699	700-799	800-899	900-999	1000+	All sizes
Residential												
Batinah	5	45	99	37	39	4	1	–	–	3	9	242
W. Hajar	1	8	9	3	2	–	–	–	–	–	4	27
E. Hajar	–	–	7	3	1	–	–	–	–	–	–	11
Dhahirah	1	12	9	3	1	–	–	–	1	–	1	28
Oman interior	22	51	98	17	7	2	3	–	3	3	7	213
Sharqiya	3	19	13	5	1	1	–	2	–	–	12	56
Sur and Ja'alan	19	232	127	48	7	3	5	1	–	–	10	452
All areas	51	367	362	116	58	10	9	3	4	6	43	1,029
Non-residential												
Batinah	5	9	13	11	6	3	–	1	–	–	2	50
W. Hajar	1	–	–	–	1	–	–	–	–	–	–	2
E. Hajar	1	–	–	–	–	–	–	–	–	–	–	1
Dhahirah	–	1	2	–	–	–	–	–	–	–	3	6
Oman interior	1	–	1	–	–	–	–	–	1	–	2	5
Sharqiya	3	–	–	1	–	1	–	–	–	–	4	9
Sur and Ja'alan	32	4	12	2	–	1	–	–	–	2	5	58
All areas	43	14	28	14	7	5	–	1	1	2	16	131
Mixed												
Batinah	1	9	10	14	5	–	–	–	1	–	4	44
W. Hajar	2	–	1	–	–	–	–	–	–	–	1	4
E. Hajar	–	–	–	–	–	–	–	–	–	–	2	2
Dhahirah	–	1	–	–	–	–	–	–	–	–	–	1
Oman interior	1	3	1	1	2	–	–	–	–	–	3	11
Sharqiya	1	2	–	–	1	–	–	–	–	–	–	4
Sur and Ja'alan	3	5	1	1	2	–	–	–	–	1	–	13
All areas	8	20	13	16	10	–	–	–	1	1	10	79
Total all purpose												
Batinah	11	63	122	62	50	7	1	1	1	3	15	336
W. Hajar	4	8	10	3	3	–	–	–	–	–	5	33
E. Hajar	1	–	7	3	1	–	–	–	–	–	2	14
Dhahirah	1	14	11	3	1	–	–	–	1	–	4	35
Oman interior	24	54	100	18	9	2	3	–	4	3	12	229
Sharqiya	7	21	13	6	2	2	–	2	–	–	16	69
Sur and Ja'alan	54	241	140	51	9	4	5	1	–	3	15	523
All areas	102	401	403	146	75	15	9	4	6	9	69	1,239

* Number relates to the construction projects for which building permits have been granted.

Annex XV. List of important projects to be realized during Second Five Year Plan period

1. The completion of the Khuwan area project in the capital area.

2. The expansion of the sewerage pumping station in Darsait.

3. The completion of the project of assigning names to the streets of the capital area.

4. The construction of several car parking areas in the commercial areas of the capital.

5. The establishment of a number of public parks in the capital and in the Wilayats.

6. The establishment of the Nasseem public park in Rumais by the Ministry of Diwan Affairs.

7. The construction of several market places in the Wilayats and in the capital area.

8. The establishment of garbage collection points in various regions of the Sultanate.

9. The conducting of advisory studies for town planning.

10. The construction of 16 municipality buildings in the Wilayats.

11. The establishment of a public park in Salalah by the Ministry of State of Dhofar.

12. The establishment of sewerage systems and garbage collection points in Bayah, Khasab and Bukha in Musandam.

Annex XVI. Important housing projects

1. The construction of low-cost houses in the capital area at a total cost of RO 25 M.

2. The construction of substitute houses for those affected by public projects in the capital area at a total cost of RO 15 M.

3. The provision of RO 10 M in assistance funds for the improvement of existing houses in the capital area.

4. The construction of low-cost houses at a total cost of RO 5.24 M in Salalah, Thamrit, Sadah, Shleem, Shuwaimiah, Sharbatat, Soukrah, Kohl and Hasik in the southern region.

5. The provision of RO 3 M in assistance funds for the improvement of existing houses in the southern region.

6. A housing programme for the Jabal in Dhofar at a total cost of RO 3.89 M to be carried-out by the Ministry of State of Dhofar.

7. The construction of low-cost houses in Musandam at a total cost of RO 1.0 M.

8. The provision of RO 1.0 M in assistance funds for the improvement of existing houses in Musandam.

9. The construction of low-cost houses at a total cost of RO 30.8 M in the following areas: Rostaq, Buraimi, Bani Bu-Ali, Ibri, Liwa, Al-Badiah, Mahdha, Bani Bu-Hassan, Al-Kamel and Al-Wafi, Sohar, Shinas, Adam, Al-Awabi, Manah, Al-Khabourah, Baddia, Saham, Ibra, Bahla, Nakhal, Yanku, Wadi Al-Maawel, Suqaiq, Al-Qabil, Al-Mudhaibi, Izki, Sur, Musanaa, Barka, Quriyat, Samail, Al-Hamra, Bidbid and Nizwa.

10. The provision of RO 10.0 M in assistance funds for the improvement of existing houses in the Wilayats.

Source: Oman, Second Five Year Plan.

Annex XVII. Monthly production and consumption of water in the capital area
(million Gallons)

	1970		1971		1972		1973		1974		1975		1976		1977	
	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption
January	13.0	0.8	25.9	2.8	25.9	9.6	36.7	10.5	17.6	-	30.1	22.7	31.3	28.7	43.6	40.1
February	13.0	0.7	25.9	2.7	25.9	9.3	36.7	11.6	18.3	13.5	27.1	15.4	30.3	27.3	49.3	38.1
March	13.0	0.8	25.9	3.7	25.9	9.7	36.7	14.2	18.0	18.0	33.9	22.3	32.4	28.6	71.0	61.9
April	13.0	0.7	25.9	4.7	25.9	13.5	35.7	14.4	20.0	16.3	32.3	23.7	23.4	21.7	89.1	65.5
May	13.0	0.8	25.9	4.7	25.9	12.4	36.7	16.2	23.4	19.6	32.5	22.2	21.6	20.1	101.4	64.9
June	13.0	0.7	25.9	4.7	25.9	11.0	36.7	16.5	23.4	14.6	30.7	23.6	33.0	30.2	103.0	96.0
July	13.0	0.8	25.9	4.7	25.9	10.9	36.7	18.8	28.0	22.1	30.7	26.9	45.1	32.2	99.6	95.8
August	13.0	0.7	25.9	6.2	25.9	11.8	36.7	19.5	31.7	23.1	28.8	26.4	49.6	28.1	93.9	91.9
September	13.0	0.8	25.9	6.8	25.9	13.6	36.7	15.0	26.4	24.8	26.8	24.0	30.8	37.1	88.0	86.0
October	13.0	0.7	25.9	6.5	25.9	15.7	36.7	14.9	33.4	24.8	28.2	25.1	46.2	32.6	82.0	79.6
November	13.0	0.8	25.9	7.4	25.9	13.9	36.7	16.5	27.3	24.3	26.8	26.0	39.7	35.4	86.7	84.0
December	13.0	0.7	25.9	8.0	25.9	12.0	36.7	16.4	29.2	21.1	30.6	28.2	46.5	34.8	94.6	88.9
Total	156.0	9.0	310.8	62.9	310.8	143.4	440.4	184.5	296.7	222.2	358.5	286.9	429.9	356.8	1,002.2	892.7

Annex XVII. (Continued)

	1978		1979		1980		1981		1982		1983		1984	
	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption
January	95.8	89.9	114.1	97.0	157.2	107.5	215.1	117.4	264.9	202.9	290.7	175.1	337.2	203.0
February	67.8	65.5	108.7	91.7	153.1	131.2	203.3	136.3	234.0	166.2	271.4	198.5	358.8	200.2
March	85.0	76.9	125.2	97.6	182.2	99.0	264.5	143.9	249.8	188.1	318.7	225.3	401.5	191.7
April	93.7	92.5	127.4	114.5	191.1	131.3	185.8	158.0	262.7	244.3	310.0	262.0	420.6	233.1
May	105.7	92.6	145.0	110.9	219.3	102.3	261.6	152.5	305.0	236.1	380.0	261.6	252.0	222.3
June	114.4	104.5	153.0	111.4	230.6	105.2	273.9	156.8	347.2	214.9	419.7	261.9	315.8	223.9
July	119.1	104.4	171.3	126.7	218.7	134.3	285.2	158.8	324.8	227.8	390.8	272.8	445.0	328.1
August	117.8	98.9	162.3	119.0	223.9	143.3	284.8	182.0	325.1	220.7	370.6	244.3	323.6	286.0
September	113.5	108.5	159.3	123.5	221.6	133.7	277.2	184.4	323.3	220.2	372.7	255.7	291.8	294.5
October	124.2	100.1	166.2	123.7	225.9	180.8	283.9	167.8	331.2	273.0	402.9	272.5	323.8	278.8
November	114.6	103.5	159.6	127.1	239.8	142.0	197.8	173.5	301.3	218.0	392.6	267.7	425.4	278.8
December	113.7	90.0	153.8	117.7	195.2	121.7	243.1	149.9	287.2	189.1	360.2	242.6	437.6	311.1
Total	1,265.3	1,127.3	1,745.9	1,360.8	2,458.7	1,532.3	2,976.2	1,881.3	3,556.5	2,601.3	4,280.3	2,940.0	4,331.1	3,051.4

Source: Statistical Year Book, 1985.

Annex XVIII. Asphalt roads in Oman, 1984

Road	Length in kms at the end of						
	1978	1979	1980	1981	1982	1983	1984
Seeb - Sohar - Khatmelaha	265	265	265	265	265	265	265
Mutrah - Sib (double carriage)	45	45	45	45	45	45	45
Sib - Nizwa (with links)	154	154	154	154	154	154	154
Sohar - Buraimi (Wadi Iqizi)	121	121	121	121	121	121	121
Ibri - Buraimi (with links)	162	162	162	162	162	162	162
Masnaa - Rostaq	45	45	45	45	45	45	45
Bid Bid - Sur (with links)	268	268	268	268	268	268	268
Ruwi - Bustan	8	8	8	8	8	8	8
Greater Mutrah - interior roads	42	42	42	42	42	42	42
Al-Wigiga - Al-Aqr	22	22	22	22	22	22	22
Quorum roads	16	16	26	26	26	26	26
Mutrah - Quriyat (A, B)	66	88	88	88	88	88	88
Bustan - Sidan	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Muscat - Mutrah sea road (double carriage)	3	3	3	3	3	3	3
Nizwa - Ibri (the work continues)	100	190	261	261	261	261	261
Nizwa - Thamrit	-	50	390	787.5	787.5	787.5	787.5
Seeb - Interior roads	-	3.5	3.5	3.5	3.5	3.5	3.5
Al-Arig road for diplomatic city	-	2.6	2.6	2.6	2.6	2.6	2.6
Barka - Nakhal - Al-Wabl - Rostaq	-	-	35	82.2	82.2	82.2	82.2
Seeb - Al-Hail (1-14)	-	-	7	7	7	21.5	21.5
Boshar Road	-	-	5	9	9	9	9
Salalah - Thamarit	77	77	77	77	77	77	77
Al Mamurah - Taqa	19.5	19.5	19.5	19.5	19.5	19.5	19.5
Salalah - Raysut	16	16	16	16	16	16	16
Salalah - interior roads	45	50	97	97	97	97	97
Hajef road	6	6	6	6	6	6	6
Salalah - Titan -Qaftut	-	-	-	38.3	38.3	38.3	38.3
Ain Hamdan	-	-	-	6.8	7	7	7
Wattaya roads	-	-	-	3.9	3.9	3.9	3.9
Qurum development (9.8)	-	-	-	7	7	7	7
Dhank road	-	-	-	4.5	6	6	6
Taqa - Murbat - Tiwi - Itir	-	-	-	43.3	51.9	61	61
Taqa - Shebir	-	-	-	39.6	40.2	40.2	65.7
Ashan-nyib - Ain Arizat	-	-	-	23.7	30.1	42.9	42.9
Raysut - Mghesil	-	-	-	46.2	68.2	71.5	71.5
Darsail - Quorum (double carriage)	-	-	-	-	-	6	17.9
Barka - Interior roads	-	-	-	-	-	20	36
Muhdah - Wadi Al Jazi	-	-	-	-	-	21.4	21.4
Flyover	-	-	-	-	-	3	5.1
Sib - Al-Khaud	-	-	-	-	-	15	15
Sib - Al-agr (double carriage)	-	-	-	-	-	240	240
Darsait - Al-Wadi Al-Kabir (double carriage)	-	-	-	-	-	2.7	2.9
Muttrah - Quriyat Links	-	-	-	-	-	-	30
Total	1,485.1	1,658.2	2,173.2	2,835.2	2,875.0	3,222.3	3,308

Source: Statistical Year Book, 1985.

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