

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF COMMERCE AND INDUSTRY  
THE SULTANATE OF OMAN

**STUDY  
ON  
MASTER PLAN FOR INDUSTRIAL DEVELOPMENT  
IN  
THE SULTANATE OF OMAN**

DECEMBER 1994



**UNICO INTERNATIONAL CORPORATION**

**TOKYO, JAPAN**

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## Preface

In response to the request from the Government of the Sultanate of Oman, the Government of Japan decided to conduct a study on Master Plan for Industrial Development in the Sultanate of Oman and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to the Sultanate of Oman a study team headed by Mr. Masayasu Sakanashi of UNICO International Corporation, four times between November 1993 and November 1994.

The team held discussions with the officials concerned of the Omani Government, and conducted field surveys at the study area. After the team returned to Japan, further studies were made and the report was prepared.

I do hope that this report will contribute to the promotion of the program and enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Omani Government for their close cooperation extended to the team.

December 1994

A handwritten signature in black ink, reading "Kimio Fujita", written in a cursive style.

Kimio Fujita

President

Japan International Cooperation Agency



December 1994

Mr. Kimio Fujita  
President  
Japan International Cooperation Agency  
Tokyo, Japan

Dear Mr. Fujita

Letter of Transmittal

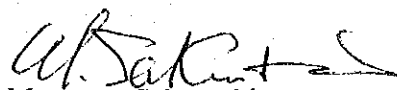
We are pleased to submit to you the final report on the Study on Master Plan for Industrial Development in the Sultanate of Oman. The report contains studies on the endowment of natural resources and the present state of industries in Oman, analysis of the underlying conditions affecting the pursuance of industrialization, formulation of industrial development strategy and industrial development plan based on the foregoing studies and analysis, and the recommendation on the government programs to support the industrial development.

More specifically, the recommended government programs relate to the intensification of export promotion, encouragement of foreign investment, intensification of financing programs/schemes for industrial development, human resource development, establishment of technological basis, and further grading up of infrastructure.

Oman is implementing the fourth year program of the Fourth Five-Year Plan, and will start the Fifth Five-Year Plan in 1996. We believe that the industrial development plan and government support programs recommended in the report serve the grounds for the development plan for the industrial sector, which will bring about substantial contribution to the industrial development in the country.

We wish to take this opportunity to express our sincere gratitude to your Agency, the Ministry of Foreign Affairs and the Ministry of International Trade and Industry of the Government of Japan for valuable advice and support provided on this study. We also wish to express our deep gratitude to the Ministry of Commerce and Industry and other relevant authorities of the Sultanate of Oman for the close cooperation and substantial assistance extended to us during our investigations and study.

Very truly yours,

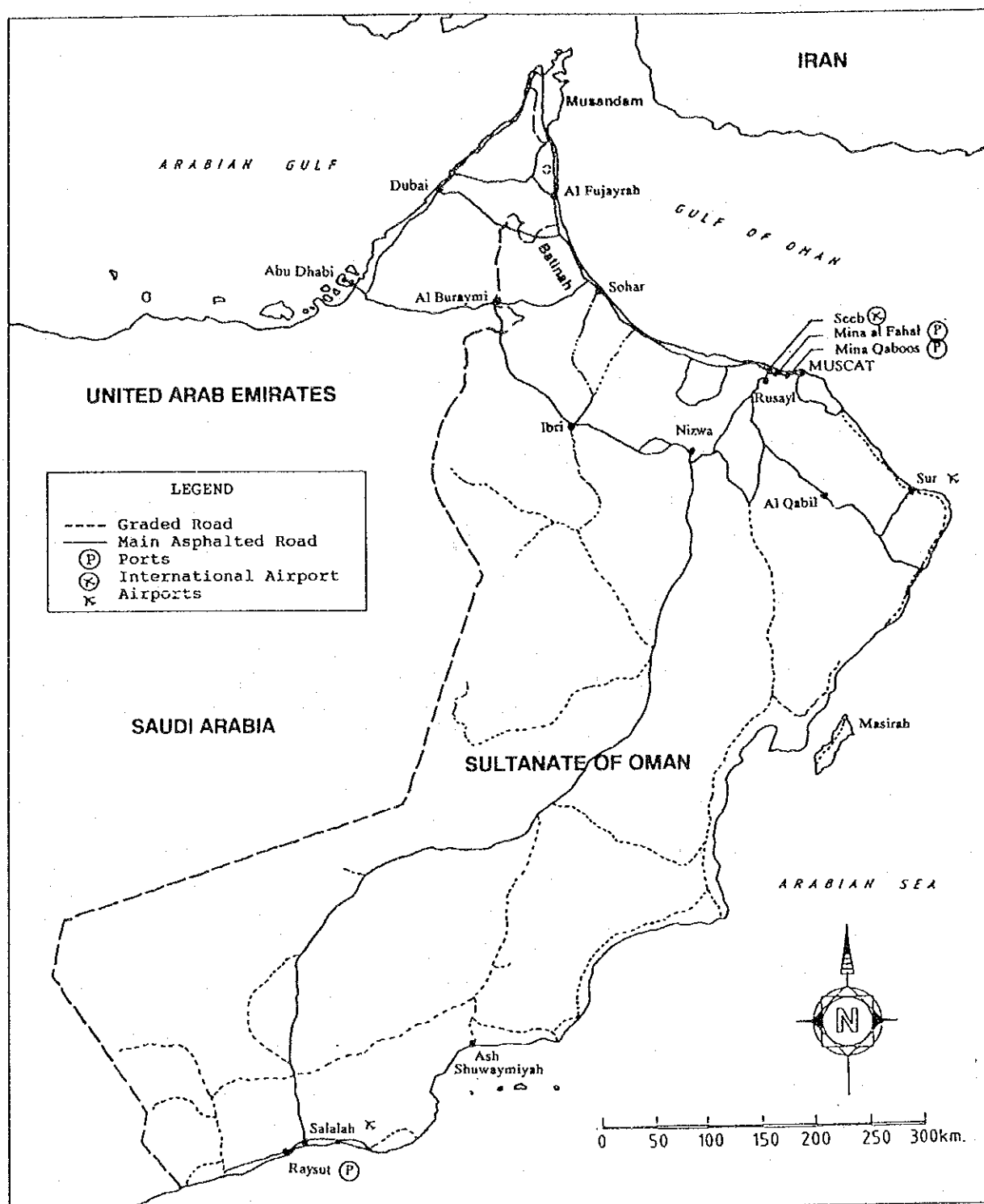
A handwritten signature in dark ink, appearing to read 'M. Sakanashi', with a stylized flourish at the end.

Masayasu Sakanashi

Team Leader,  
Study on Master Plan for  
Industrial Development  
in the Sultanate of Oman



# THE SULTANATE OF OMAN





## Abbreviations

ABS	Acrylonitrile Butadiene Styrene
ADB	Asian Development Bank
ASEAN	Association of South-East Asian Nations
BBL	Barrel
BTU	British Thermal Unit
CAD	Computer Aided Design
CAM	Computer Aided Manufacturing
CCR	Continuous Catalytic Regeneration
CIF	Cost, Insurance, and Freight
CKD	Completed Knock Down
CSP	Common Service Project
DH	Dirhem (U.A.E.)
DWT	Dead-weight Tonnage
EC	European Community
ECU	European Clearing Unit
EDC	Ethylene Dichloride
F/S	Feasibility Study
FAO	Food and Agriculture Organization, United Nations
FRC	Fiber Reinforced Concrete
FRP	Fiber Reinforced Plastic
FZEs	Free Zone Establishments
GCC	Gulf Cooperation Council
GCF	Gross Capital Formation
GDP	Gross Domestic Product
GGs	Government Gas System
GOIC	Gulf Organization for Industrial Consulting
HDPE	High-density Polyethylene
HS	Harmonized Commodity Description and Coding System
IBRD	International Bank for Reconstruction and Development
IDU	Industrial Development Unit
IRR	Internal Rate of Return
ISIC	International Standard Industrial Classification
ITMF	International Textile Manufacture Federation
JETRO	Japan External Trade Organization
JICA	Japan International Cooperation Agency
L/C	Letter of Credit
LDPE	Low-density Polyethylene
LLDPE	Liner Low-density Polyethylene
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MCI	Ministry of Commerce and Industry
MFA	Multi-Fiber Arrangement

MNC	Multinational Corporation
MPM	Ministry of Petroleum and Minerals
MTBE	Methyl Tertiary Butyl Ether
NAFTA	North American Free Trade Agreement
NIES	Newly Industrizing Economies
OCCI	Oman Chamber of Commerce and Industry
ODB	Oman Development Bank
OECD	Organization of Economic Cooperation and Development
OEM	Original Equipment Manufacture
OJT	On the Job Training
OMCO	Oman Mining Co LLC
ORC	Oman Refinery Company
PDO	Petroleum Development Oman
PE	Polyethylene
PEIE	The Public Establishment for Industrial Estate
PS	Polystyrene
PVC	Polyvinyl Chloride
R&D	Research and Development
REM	Replacement Equipment Market
RFCC	Residual Fluid Catalytic Cracking
RIE	Rusyle Industrial Estate
RIEA	Rusyle Industrial Estate Authority
RO	Rial Omani
ROI	Return on Investment
S/W	Scope of Work
SCF	Standard Cubic Feet
SGRF	State General Reserve Fund
SITC	Standard International Trade Classification
SMI	Small and Medium Industry
TEU	Twenty-Foot Equivalent Unit
UAE	United Arab Emirates
UN	United Nations
US	United States
USA	United States of America
VCM	Vinyle Chloride Monomer

### Conversion Factors

1 cu. ft. = 0.028317 m<sup>3</sup>  
 1 BBL = 0.15899 kl  
 1 BTU = 0.252 kcal

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## **1 Background, Objective, and Scope of the Study**

### **1.1 Background and Objective of the Study**

Traditionally, Oman's economy has heavily depended upon oil exports. The government has spent sizable portions of oil revenues in construction of infrastructure and investment in selected enterprises in basic industries, while encouraging private investment in the industrial sector. These initiatives have brought about moderate expansion of some industrial sectors, but dependency on the oil sector is still formidable, accounting for 42% of the country's GDP. In the meantime, depressed oil prices have squeezed the government finance and forced the government to take austerity measures through budget cutbacks since 1987.

The country's recent industrial development policy has been founded on the strategy to promote 3 consumer-related subsectors, namely food processing, construction materials, and housing, with focus on small and medium-scale enterprises, rather than pursuing the development of large-scale and heavy industries such as chemical. This has been inherited from the ongoing industrial development policy of the Ministry of Industry and Commerce, which sets priority to industrial decentralization (to control concentration of working population in the metropolitan area.), while avoiding promotion of industries heavily dependent upon imported materials, as well as excess dependency on foreign workers.

Clearly, the country is facing an urgent task of accelerating post-oil economic development, thereby freeing the economy from reliance on oil resources as lifeline. This entails the development of a new and effective industrialization strategy.

The country's Fifth Five-Year National Development Plan, scheduled to start in 1996, is considered to serve as a benchmark in this direction. Prior to the drafting of the new plan, the Government of Oman requested the Government of Japan to provide assistance in preparing the Industrial Development Master Plan.

In response, Japan International Cooperation Agency (JICA) sent a study mission tasked in the selection and identification of mining and manufacturing projects in February 1993. The mission conducted field survey and investigation to identify and select promising areas of new industrial development and to confirm the intent of the government as to what role is expected in the proposed project. In May 1993, JICA sent a pre-feasibility study team to Oman, which agreed and signed the Scope of Work with the Government of Oman. Based on the Scope of Work that defines detailed contents,

activities, and responsibilities related to the study, JICA sent a study team organized by UNICO International Corporation to Oman. This report has compiled the results of field survey and related analyses conducted by the study team.

## **1.2 Scope of the Study Agreed**

The scope of the Study is defined in the Scope of Work which has been agreed between the Sultanate Government and JICA as shown in the following:

### **<GENERAL>**

- (1) Review of General Background
  - 1) Macro-economic Situation and Trend
  - 2) National Development Policy
  - 3) Review of the "Fourth Five-Year Development Plan"
  - 4) Trade and Foreign Investment
  - 5) Infrastructure; Human Resources

### **<INDUSTRIAL SECTOR>**

- (2) Review of Industrial Development
  - 1) Industrial Development Policy
  - 2) Laws, Acts, and Regulations
  - 3) Production and Trade Trend
  - 4) Review of the "Prefeasibility Study for Industrial Development in the Sultanate of Oman" done by JICA in 1978 and other important studies by other organizations
- (3) Survey on Industrial Sector
  - 1) Present Status of the Industry  
(production, import and export, marketing, etc.)
  - 2) Factory Survey
  - 3) On-going and Future Development Projects by the Sultanate
  - 4) Identification of Metallic Minerals
  - 5) Identification of Non-metallic Minerals
  - 6) Location, Reserve of Metallic and Non-metallic Minerals  
(literal survey)
  - 7) Quality Analysis of Metallic and Non-metallic Minerals  
(within 10 mineral resources)
  - 8) Location, Reserve, and Quality of Petroleum and Natural Gas  
(literal survey)
  - 9) Review of Policy on the Exploitation of Natural Resources

**<MASTER PLAN>**

**(4) Formulation of a Comprehensive Master Plan**

1) Selection of Promising Industrial Sub-sector(s) and Project(s) which indicate to be viable

2) Project Descriptions

3) Implementation Schedule

4) Cost Estimation

5) Recommendation of Development Program for each of the selected Sub-Sector(s) and Project(s) including the following:

-Infrastructure

-Human Resources

-Government Incentives

-Institutions and Organizations for Industrialization

-Technology

-Market

6) Recommendation for Foreign Investment Promotion

(5) Conclusion





## **2 Socio-economic Conditions and National Economic Development Plan**

### **2.1 General Conditions of the Sultanate of Oman**

#### **2.1.1 Geographic features**

The Sultanate of Oman is located in the south-east corner of the Arabian Peninsula; Latitudes 16°41' to 26°20' North and Longitudes 51°50' to 59°40' East. It has a total land area of approximately 309,500 km<sup>2</sup>, making it the second largest territory in the Arabian Peninsula, bordering Saudi Arabia and the United Arab Emirates (UAE) in the West and the Republic of Yemen in the South.

To the north of its main land mass is the Musandam Peninsula. This isolated strip of Omani territory, separated in part by the UAE, has a commanding position at the entrance to the Arabian Gulf as it guards the Strait of Hormuz. Oman also governs two villages within the UAE. The country has a coastal line extending about 1700km, from the Strait of Hormuz in the North to the borders of the Republic of Yemen, facing three seas; the Arabian Gulf, Gulf of Oman and the Arabian Sea, and is also sovereign over a number of small islands most notably, Masirah, Kuriya Muria and Darmamiyat.

The land consists of plains, dry river beds called wadis, desert and mountains. The most important area is the plain facing the Gulf of Oman and the Arabian Sea with an area occupying about 3% of the total land. The mountain ranges occupy about 15% of the land. The remaining area is mainly sand and desert.

Northern Oman, which comprise most of the resources and people, is separated from the southern province of Dhofar by 700km of desert. The main topographical feature of northern Oman is the Hajar mountain range which runs parallel to the coast, from the northern border, with UAE to the A'Sharqiya region. Its highest and most formidable peaks, reaching about 3,000m, lie at the south-east of Jabal Al-Akhdar. The coastal plain is situated between the coast of the Gulf of Oman, and the Hajar mountain range accounting for a distance of 270 km from the frontier, with the UAE in the south-east near to Muscat. The central part of Oman consists of gravel plains and sand seas, notably the Wahiba Sands and part of the Empty Quarter. In Dhofar, the southern part of Oman, the mountains are lower ranging from 1,000-2,000m above sea level and much less formidable in topography, benefitting from regular summer monsoon that generate

sufficient grass to support cattle raising.

The northern part of Oman's coastline in the Al Batinah region is the principal agricultural area irrigated through wells, but there remains many small agricultural villages scattered throughout the mountain wadis. In Dhofar cultivation takes place on the coastal plains near Salalah.

The climate differs from one area to another. In the coastal areas, it is hot and humid in summer and mild in winter, while the interior areas are featured with desert climate; hot and dry in summer and cool in winter. Generally, Oman has little and irregular rains, though heavy rains fall occasionally, except Dhofar uplands which receive monsoon rains regularly between June and October.

### **2.1.2 Population**

Oman's population is comparatively small. According to the first census conducted in late 1993, the population is 1.48 million of Omani nationals out of a total population of 2.02 million which includes non-Omani residents. The 1990 estimates indicate that the estimated average annual growth rate of the resident national population is 3.5%, with the average fertility rate estimated at 7.5 children per woman. If these trends continue, the population will double in the next 18-20 years. Out of the total Omani population in 1990, about 53% were under 15 years of age, and 22% were within the 15 to 30 year bracket. This structure implies that the young generation of Omanis working force will substantially increase in the next 10 years.

Omani population is concentrated mainly on the Al Batinah coast, the Hajar valley, the capital area of Muscat region, and the southern part of Dhofar. The population in the capital area has grown rapidly and is now inhabited by more than 600,000 people. Other important towns are Sohar in the Al-Batinah region, Sur in the extreme east, Salalah in Dhofar, and Nizwa in the interior.

## **2.2 Economic Development and Current State of Economy**

### **2.2.1 Economic structure and growth trends**

The Oman's economy has substantially expanded registering a steady growth over the last two decades since the First Five-Year Development Plan was launched in 1975. Table 2-1 tabulates the growth of GDP from 1975 to 1992. Nominal GDP has grown at

12.2% per annum in average during the First to Third Five-Year Development Plan period from 1976-1990. Accordingly, GDP per capita increased more than threefold from RO.780 (or US\$2,258) in 1975 to RO.2,719 (or US\$7,072) in 1990. The economy achieved an improvement by 12.9% in nominal terms in 1992 after a decline of 3.3% in the preceding year.. As a result, the GDP per capita nominally increased to RO.2,984(or US\$7,760) in 1993. The real growth of GDP in 1978 constant price recorded 8.3% per annum in average for 12 years from 1978 to 1990, and increased by 9.2% and 6.8% respectively in 1991 and 1992.

Tables 2-2 and 2-3 show the structural change and growth of GDP by major sectors. In the 1970's, the Oman's economy depends heavily on oil. Since the First Five-Year Development Plan, the government's long-term economic development policy placed emphasis on diversification of the economic structure, calling for new sources of national income apart from the revenues on oil, with a view of replacing the latter in the future through enhanced proportion of investments on income generating sources in the non-oil sectors, especially in the areas of industry, mining, agriculture and fisheries.

In 1975, the oil sector contributed about 67.2% to the nominal GDP. During the First Five-Year Plan period of 1976-1980, the oil sector has achieved substantial growth in value-added at an average rate of 21.3% p.a. in nominal terms, as favorable movements transpired in the international oil market. This despite the slight decline in its relative share in the nominal GDP to 61.5% in 1980, following a rise in the contribution from the non-oil sectors.

In the Second Five-Year Plan period, the nominal growth of the oil sector has declined to 5.5% per annum, decreasing its relative share of GDP to 48.2% in 1985, because oil revenues remained to increase marginally due to fall in oil prices from US\$36.8/BBL to US\$27.1/BBL, despite increases in oil production from 283,000 BBLD (BBLD; barrel per day) in 1980 to 498,000 BBLD in 1985.

The growth of the oil sector further declined to 3.5% per annum in average during the Third Five-Year Plan period, resulting from a slump in oil revenues due to a sharp collapse of international oil prices. However in 1990, its relative share in GDP has remained at 48.1%, nearly the same level as 1985, since the non-oil sectors have also stagnated under unfavorable economic conditions brought about by significant reduction in oil prices.

Though the relative share of the oil sector in GDP has currently been reduced to below 50%, the Oman's economy is virtually dependent on oil to a considerable extent. In 1991, the nominal value-added of the oil sector decreased by 16.6% from that in 1990 since oil prices have fallen to the range of US\$17 to 18 per barrel. Once it increased by 13.0% in 1992, but decreased by 10.7% in 1993. Thus the relative share of this sector declined to 37.4% of GDP in that year.

The non-oil sectors broadly comprise the non-oil industrial sector and service sector. The non-oil industrial sector includes mining, agriculture, fisheries, manufacturing, electricity and water, and; building and construction. The service sector consists of the government services and the private services which in turn include wholesale, retail trade, restaurants, hotels, transport, storage and distribution, financing, insurance, real estate, business services, and community and personal services.

While the non-oil industrial sector grew at an average annual rate of 11.4% in nominal terms, the service sector achieved much greater growth at 17.8% per annum in the First to Third Five-Year Plans period of 1976-1990. This resulted to a slight decrease in the relative share of the non-oil industrial sector from 13.1% in 1975 to 11.6% in 1990, compared to the share of the service sector which increased from 19.7% to 40.3% during that period. In 1993, the non-oil industrial sector and service sector accounted for 14.0%, and 48.6% of GDP respectively. Of the value-added currently recorded on the service sector, more than 60% was contributed by the private services.

In 1975, the largest contributing sectors in the non-oil industry were the building and construction sector followed by agriculture and fisheries, accounting for 9.8% and 2.7% of the nominal GDP respectively. The growth of these sectors, however, remained at 3.7% and 13.5% per annum in average respectively over the last 15 years from 1975-1990.

Substantial growth has been achieved by the manufacturing industry, and the electricity and water sector at an average annual rate of 33.5%, and 25.5% respectively in nominal terms in the period from 1975 to 1990; followed by the mining sector which has grown at 23% per annum on the average. For the last three years, the manufacturing industry, and, building and construction sector continued to grow steadily, while the growth of the mining, agriculture and fisheries, and electricity and water sector become unstable.

In 1993, the manufacturing industry accounted for 5.1% of the nominal GDP,

followed by the building and construction (4.2%), agriculture and fisheries (3.2%), electricity and water (1.3%), and mining (0.2%), or a total share of 14.0% of GDP for the non-oil industrial sector as a whole.

The manufacturing, mining as well as fisheries industries are important sectors in accelerating diversification of the economy, particularly in the development of non-oil income generating industries, since agricultural production appears to hardly attain substantial growth in the future. Contributions of the manufacturing industry and mining, however, are still small despite substantial growth achieved in the last 15 years. Intensive development of these sectors would be essential for sustaining steady growth of the economy with diversification.

### **2.2.2 Domestic savings and capital formation**

Tables 2-4 and 2-5 show the domestic savings and gross capital formation recorded in the respective periods covering the First to Third Five-Year Plans, and the last two years of 1991 and 1992.

Relatively high ratio of the domestic savings has been attained, at about 46% of GDP during the First Five-Year Plan period, but the domestic saving ratio tended to decrease in the subsequent periods; about 43% of GDP during the Second Five-Year Plan period, 41% during the Third Five-Year Plan period, and 27% in the last two years of 1991 and 1992. The gross capital formation has also been relatively high at about 27% of GDP during the First and Second Five-Year Plans period, but it declined to about 18% of GDP during the Third Five-Year Plan period and further dropped to about 17% in the last two years.

Tables 2-6 and 2-7 show the relative share of capital formation by type of economic activity. Majority of the capital formation was contributed by the public sector, accounting for an average of about 70% of the Gross Capital Formation (GCF) over the 15-year period in the First to Third Five-Year Plans (1976-1990), and 65% in the last two years. Large portion of the public capital formation was realized with public investment for the development of infrastructure, followed by investment for oil and gas development; accounting for about 54% and 22% of the public sectors GCF share respectively during the 15 years of 1976-1990. The private capital formation on the other hand, was largely realized with investment in oil development and housing, capturing about 49% and 26% of the private sector's GCF share respectively. The capital formation

in the manufacturing industry was only 10.2% of the private sector capital formation and 1.8% of the public sector capital formation, thus accounting for only 4.4% of the total GCF in that period.

This trend indicates that investments by both public and private sectors have been dominantly appropriated for the development of infrastructure and housing, as well as oil and gas development. And therefore, investments in the manufacturing industry as well as the mining industry have remained in a comparatively small portion. It is obvious that the growth of non-oil industry requires the enhancement of investments as indicated in the economic development policy.

### **2.2.3 External trade and balance of payments**

Table 2-8 gives the value of external trade over the last decade, in which Oman recorded customarily a visible trade surplus, although fluctuating from year to year depending on oil export earnings.

The overwhelming majority of Oman's exports is based on oil. The dominance of the oil exports has led to instability in the total exports, as it becomes affected by any turbulence in the international oil market. Table 2-9 shows the production and exports of crude oil in Oman. In 1986, the oil price collapse caused a 39% decline in oil export earnings. After a fluctuating performance in 1988-89, there was a 40% rise in the oil export earnings in 1990 following an oil price hike arising from the Gulf crisis. In 1991-92 the oil export earnings decreased to the recorded level in 1985. In 1993 although the export volume of oil increased by 5.5%, the export earnings of oil decreased by 8.3% due to further fall of oil price. Although the non-oil exports have been gradually increasing in the last five years, oil exports still account for around 90% of the total exports. In 1992, for the first time, the relative share of oil exports declined to 84% due to increases in non-oil exports and re-exports, which further declined to 78% in 1993.

Table 2-10 gives the structure of non-oil exports by main category in 1988, 1991 and 1992. The non-oil exports increased by 13.8 times in 1988, 17.3 times in 1991 and 21.2 times in 1992 with reference to 1980 level. In the early 1980's the non-oil exports were mostly food and live animals and only small portion accounted by beverages and tobacco. However, the exports of mineral ores and manufactured goods including textile fabrics, non-ferrous metals and metal products were added since the middle of 1980's. The non-oil exports currently add electrical machinery and appliances, and miscellaneous

manufactured articles such as garments and furniture. The non-oil exports, however, are still rather limited and small in size.

Table 2-11 shows the structure of imports by main category in 1989, 1992 and 1993. About one-third of the current imports is comprised of food and consumer goods, and the remaining two-third is comprised of machinery and plant equipment, raw materials and intermediates for industrial uses, and transport equipment. The imports have continued to increase by 16% in average annually over the last five years. It is likely that the imports will continue to increase along with increasing demands for food and consumer goods as well as capital goods.

It appears difficult to increase oil export earnings because of a limited crude oil production and downward trends in international oil prices, thus, the trade surplus will narrow unless non-oil exports increase to meet surging imports. In this context, more importance should be accorded to the development of export-oriented manufacturing industry.

Table 2-12 shows the balance of payments in Oman. Offsetting the trade surplus is a sizable net outflow on services and private transfers which has left Oman with a much reduced current-account surplus or deficits except in 1990, when the international price of oil soared, arising from the Gulf crisis, leading to a large current-account surplus. Outward remittances by the large number of expatriate workers in the country likewise contributed to this phenomenon.

#### **2.2.4 Employment**

Table 2-13 shows the estimate of Omani and expatriate labor force from 1975 to 1990. The economic growth led to an increase in labor demand in Oman. The total number of labor force increased from 209,000 in 1975 to 529,000 in 1990. However, this was largely attributed by the demand for expatriate labor more than Omani labor. In 1990 the employed number of Omani labor increased by one-and-a-half fold from 1975 or 207,000, but the percentage of Omani labor from total employed labor in turn declined to 39.1% in contrast to 64.6% recorded in 1975.

#### **2.2.5 Public finance**

Table 2-14 shows the government revenue and expenditure. The main sources of revenues are oil and gas, which accounted for more than 80% of the total revenue up to

1991. In the last two years, the share of the oil and gas sector decreased to about 76%. The government expenditure exceeded over revenues in the last 11 years since 1982, except in 1990 when government earnings substantially increased with oil price hike. Deficits were financed through foreign grants and foreign loan borrowings, as well as withdrawals from the State General Reserve Fund (SGRF) which was set up in 1980 that reserves a certain portion of net oil revenues to complement other government revenue surplus.

## **2.3 Economic Development Policy**

### **2.3.1 Principal objectives for the long-term economic development**

The Sultanate of Oman has launched the National Economic Development program in 1975 with the setting up of the Development Council chaired by the Sultan, in accordance with the Economic Development Law enacted in the same year.

The Development Council has approved the principal objectives for the long-term economic development of the nation in that year, which represent an integral development strategy, forming the basis for the Five-Year Development Plans and providing a framework for the national, sectoral and regional plans and programs. The Council thus adopted an economic development policy which prescribes the objectives enumerated below:

- (1) Develop new sources of national income apart from the oil revenues, with a view of replacing the latter in the future.
- (2) Enhance the proportion of investments in productive sectors, especially in the areas of industry, mining, agriculture and fisheries.
- (3) Promote regional dispersal of investments in order to benefit all the regions of the country and its people, and to eliminate the disparity in the standard of living between various regions, giving special priority to less developed regions.
- (4) Support and develop present population centers and protect them from the risk of mass migration to densely populated areas, and conserve the environment.
- (5) Pay attention to water resources which are a vital element necessary for the continuation and development of economic activities.
- (6) Pay due attention to the development of national human resources in order that they may play an integral part in the Omani economy.
- (7) Set up the nation's infrastructure to support the economic activity and human life of the people.



- (8) Promote local commercial activity and remove constraints in transport and storage, and deficiencies which impede the consolidation of free market operations and fair competition.
- (9) Establish the components of a free market economy based on the activities of the private sector, and on fair competition; and provide loans for vital projects commensurate with the resources available to the State.
- (10) Enhance the efficiency of the civil service.

### **2.3.2 Major thrusts of policy instruments in the First to Third Five-Year Development Plans**

The First Five-Year Development Plan was launched in 1975 when the nation experienced a momentum for growth during the oil boom. This plan was a preliminary step towards its entry into new phases of development, which directed primarily at: (a) completing the infrastructure, (b) increasing the absorptive capacity of the economy, and (c) initiating policies of support and encouragement to the private sector with a view to increasing competition and completing the components of the free market economy. The State General Reserve Fund (SGRF) was established in 1980, which reserved 15% of net oil revenue to complement any other government revenue surplus.

The Second Five-Year Development Plan was started in 1981 under favorable economic conditions associated with continuing increase in oil revenues. The Plan called for (a) consolidation of the income of SGRF, (b) acceleration of economic development, (c) realization of a capital formation level reaching one quarter of GDP and, (d) stimulation of the private sector to increase its participation in economic and social activities through direct and indirect sets of policies.

Specific projects were implemented focusing on the completion of a network of infrastructure and extending it to different areas of the country, giving priority to some regions that require special attention and concentrated effort, and paving the way for the development of natural water resources.

The Third Five-Year Development Plan was conceived under unfavorable circumstances such as significant reduction in oil prices, making it a test on the degree of stability of the national economic base, and the soundness of the foundations upon which development was built.

Even in such difficult situations, the Plan directed at maintaining a suitable standard of economic activity in the country; continuing the provision of basic services by the government to the citizens like education, health and social assistance, while, on the other hand, conserving the economic and financial balance of the country. It called for taking specific policies and measures that will reduce government expenditure, amending priorities in the Plan for investment projects, while financing major part of the deficit or imbalance between government revenue and expenditure, through withdrawals from SGRF amounting to RO.1,234 million by the end of 1989.

### **2.3.3 Policy framework and target for the Fourth Five-Year Development Plan**

Following the three previous Five-Year Development Plans, the Fourth Five-Year Development Plan was implemented in 1991. The Plan was formulated with the following broad guidelines:

- (1) Achieve a CDP of not less than 5% per annum in real terms, on the average.
- (2) Pursue the policy of diversification of national income; reduce dependence on oil; link the oil production ceiling with technical capacity; work towards extending the expected life of oil reserves as much as possible; continue to exert efforts to change the structure of the Omani economy by placing emphasis on investment in other non-oil income producing sectors, particularly agriculture, fisheries, manufacturing and tourism, as well as the services sector in order to increase their contribution to GDP, and to widen the production base.
- (3) Ensure regional development by directing investments to the various regions, especially outside the region of Muscat.
- (4) Pay regard to developing human resources in order to raise the level of participation of national workers in the various economic and social activities. Achieve a balance between the targeted rates of economic growth and the needs of the work force on the one hand, and the output of the educational and training system on the other.
- (5) Support the capabilities of the various sectors and activities of the national economy (government and private) to provide work opportunities in all avenues wherein the national work force may be used, so that it will result in raising the level of participation of national labor force while realizing the aims of Omanization.
- (6) Achieve a balance between total public expenditure and the government revenues available, and place a maximum limit on the annual deficit permissible. At the same time work towards developing non-oil revenues so that its level of contribution to

overall revenues is not less than 20% during the next two Five-Year Development Plans.

- (7) Emphasize the adoption of an economic system, based on free market economy which will ensure fair competition and raise efficiency; by correcting any distortions in the economic structure that will strike the balance between revenue and expenditure or the balance of current and commercial operations and; by promoting the role of private sector and encouraging its contribution to the various areas of economic activity.
- (8) Continue the necessary research, surveys and studies as the best means of developing natural water resources and optimizing their uses.
- (9) Determine the balance of State debt so that it does not exceed allowable limits, either in its total amount or the costs of servicing the debt itself.

The adopted Plan has salient features as enumerated below:

- (1) Follow the implementation of three previous Five-Year Development Plans, the strategies contained in which have been proven competent and consistent.
- (2) Focus attention towards achieving a situation of gradually recovering from the unfavorable environment that is faced with a significant decline in oil prices leading to a decrease in the revenues derived from it, as well as in improving financial position of the State and its reserves.
- (3) Give top priority on previous investments realized in the form of production programs, and related projects that have provided benefits since the Fourth Five-Year Development Plan commenced during which major part of infrastructure was completed.
- (4) Emphasize the importance of two elements in the Plan, namely, "policies" and "programs".
- (5) Give attention to planning concept at all levels and also to the availability of better administrative and technical structures in the development process.

#### **2.3.4 Target for economic development and current achievement**

##### **(1) Economic growth**

The Plan targets a GDP growth of 6.3% per annum on the average reaching RO.4,777 million at market prices by 1995. The growth target of GDP by main sectors set in the Plan is given in Table 2-15, which is enumerated with main indices as follows:

GDP Growth Target (at current prices)

	<u>Growth Rate</u> (% p.a.)	<u>Contribution (%)</u>	
		<u>1991</u>	<u>1995</u>
1. Oil sector:	4.9	43.5	41.5
2. Non-oil sector:	7.3	56.5	58.5
(1) Productive sector:	11.2	14.1	16.4
(Manufacturing:	12.7	4.4	5.6
(2) Services sector:	6.0	42.4	42.1
3. GDP	6.3		

It placed emphasis on substantial growth of the non-oil industry, particularly focusing on the growth of mining, manufacturing and construction industries, while sustaining steady growth in the oil and gas sector, thus, projecting that the relative share in GDP of the oil and gas sector will decrease from 43.5% in 1991 to 41.5% in 1995. Whereas, the relative share of the non-oil industry sector will increase from 14.1% to 16.4%. In particular it is projected that the relative share of the manufacturing sector will increase from 4.4% in 1991 to 5.6% in 1995 while that of the service sector will be at 42.1% by 1995, nearly same level of 42.4% achieved in 1991.

For purposes of projection, the oil production and oil price were assumed as follows:

	<u>Average Daily Production</u> (000 BBL)	<u>Average Oil Price</u> (US\$/BBL)
1991	690	18
1992	678	19
1993	682	20
1994	677	21
1995	674	22
Average:	(682)	(20)

Table 2-16 gives the achievement ratio of GDP in the last three years from 1991 to 1993 in comparison with the target set in the Fourth Five-Year Plan. GDP has recorded a growth over the target every year during the last three years with substantial contribution by the service sector. The oil sector recorded an achievement higher by 6% over the target in 1992, after it fell below its target in 1991. In 1993 it was considerably lower than the target reflecting the current stagnation of the international oil price. The international oil price, as shown in Table 2-9, was lower than the projected price level in these years. Especially in 1993, the price averaged at US\$15.6/BBL, lower by about US\$4.4/BBL against the projected price, and this

resulted in decreasing the sectoral value-added by 10.7% from 1992 which is as lower by about 9.7% against the target. In 1992 the sectoral value-added achieved a growth over the target, since the oil production substantially increased despite decreases in value-added of oil output due to fall in oil price. The non-oil industry sector achieved a growth corresponding to the target in 1991 and 1992, but it remained as low as 4.4% against the target in 1993, during which the manufacturing sector achieved over the target by 6.5%, maintaining a steady growth.

The current trend, as reviewed above, implies that the achievement of the economic growth target set in the Fourth Five Year Plan would be dependent greatly on the growth of non-oil industry sector, especially the manufacturing sector; as well as the development of new natural gas fields, while largely depending on recovery of the international oil price.

## (2) External trades

The Plan targets to increase exports up to RO.2,229 million in 1995 at an average growth of 5.4% per annum, amounting RO.10,119 million of aggregate exports during the Plan's period. The target for three major components of exports (i.e., crude oil exports, non-oil commodity exports and re-exports) is as follows:

- 1) Crude oil exports: increase to RO.1,931 million in 1995 at 4.8% per annum in average
- 2) Non-oil commodity exports: increase to RO.119 million in 1995 at 10.4% per annum in average
- 3) Re-export: increase to RO.179 million in 1995 at 10% per annum in average

On the other hand, the Plan forecasts increases in imports amounting to RO.1,543 million by 1995 representing a 9.1% per annum in growth average, resulting in decreases in trade balance to a surplus of RO.686 million in 1995.

Table 2-17 highlights the exports and imports in 1991 and 1992 in comparison to the target in the Fourth Five-Year Plan. The crude oil exports and other exports exceeded the target in the period covered, but the external trade balance resulted in a surplus much smaller than the Plan's target due to an increased degree in imports vis-a-vis the increase in exports.

## (3) Capital formation

The Plan targets to achieve the capital formation at 19.2% of GDP during the Fourth

Five-Year Plan period (Attachment 2.11), consisting of 67.8% share by the public sector and the remaining 32.2% through private sector's contribution (Table 2-7). Majority of the public investment was appropriated for civil development (social structure and infrastructure) and oil and gas development, accounting for 43% and 32% of the total public investment respectively. As for private investment, the investment in the oil sector and non-oil sector was projected at 46% and 54%, respectively. Of the total private investment for the non-oil sector, the bulk of investment was focused on housing industry occupying a 32% share, and manufacturing industries accounting for 25%

Table 2-18 shows the achievement of the domestic savings and capital formation in 1991 and 1992 in comparison with the Fourth Five-Year Plan. In this period, the domestic savings have remained at a level far below the target. As for the capital formation, the achievement in 1991 resulted at a level occupying 95% of the target, because public investment remained correspondingly at 85% of the target. But in 1992, it recovered slightly over the target for both public and private sectors.

Table 2-1 Gross Domestic Product (Purchasers' Value)

	1975	1980	1985	1990	1991	1992	1993
[Current Price]							
• GDP (RO million)	722	2,063	3,454	4,051	3,917	4,422	4,416
• GDP per capita (RO)	780	1,876	2,644	2,719	2,611	2,871	2,984
(US\$)	2,258	5,431	7,655	7,072	6,791	7,468	7,760
[1978 Constant Price]							
• GDP (RO million)				2,461	2,687	2,870	n.a.
[Average Annual Growth Rate]							
• GDP at Current Price	23.4%		10.9%	3.2%	12.2%		
	(1975-80)		(1980-85)	(1985-90)	(1975-90)		
• GDP at Constant Price			8.3%				
			(1978-90)				
[Annual Changes: 1990-93]							
• GDP at Current Price					-3.3%	+12.9%	0%
• GDP at Constant Price					+9.2%	+6.8%	n.a.

Source: Attachment 2.1 (Figures in 1993 are provisional.)

Table 2-2 Relative Share (%) in GDP (Current Price)

	1975	1980	1985	1990	1991	1992	1993
1 Oil & Gas	67.2	61.5	48.2	48.1	41.8	42.0	37.4
2 Non-oil Industry	13.1	9.8	13.3	11.6	13.6	13.3	14.0
2.1 Mining	-	*	0.2	0.3	0.3	0.3	0.2
2.2 Agriculture & Fisheries	2.7	2.5	2.7	3.2	3.6	3.2	3.2
2.3 Manufacturing	0.3	0.8	2.3	3.7	4.2	4.3	5.1
2.4 Electricity & Water	0.3	0.8	1.1	1.4	1.6	1.5	1.3
2.5 Construction	9.8	5.7	7.0	3.0	3.9	4.0	4.2
3 Services	19.7	28.7	38.5	40.3	44.6	44.7	48.6
3.1 Government Services	7.3	9.4	13.8	16.3	16.8	17.3	18.8
3.2 Private Services	12.4	19.3	24.7	24.9	27.8	27.4	29.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: \* less than 0.1

Source: Attachment 2.1



Table 2-3 Growth of GDP by Sectors

	Average Annual Growth Rate (%)				Annual Changes (%)		
	1975-80	1980-85	1985-90	1975-90	1991	1992	1993
1 Oil & Gas	21.3 (-5.7)*1	5.5 (11.8)	3.5 (7.4)	9.8 (6.9)*2	-16.6 (2.9)	13.0 (6.1)	-10.7
2 Non-oil Industry	16.4 (17.6)*1	18.0 (22.2)	0.7 (0.6)	11.4 (12.0)*2	12.2 (13.8)	10.2 (5.0)	5.4
2.1 Mining	0.0 (0.0)*1	55.2 (61.5)	5.9 (-6.2)	23.0 (18.9)*2	-8.3 (37.5)	18.2 (9.1)	-38.5
2.2 Agriculture & Fisheries	21.1 (25.7)*1	12.6 (11.1)	7.3 (3.1)	13.5 (10.0)*2	7.5 (7.2)	0.0 (-3.8)	0.0
2.3 Manufacturing	51.6 (15.5)*1	38.7 (47.2)	13.1 (4.0)	33.5 (22.3)*2	10.5 (9.9)	13.1 (4.5)	21.1
2.4 Electricity & Water	51.6 (24.3)*1	18.3 (23.1)	10.2 (26.7)	25.5 (24.8)*2	5.0 (1.9)	6.3 (8.7)	-14.9
2.5 Construction	10.7 (13.2)*1	15.4 (21.3)	-12.7 (-13.6)	3.7 (4.1)*2	25.2 (37.4)	17.5 (7.0)	3.9
3 Services	33.1 (15.4)*1	17.5 (15.3)	4.5 (1.0)	17.8 (9.1)*2	6.1 (10.4)	12.9 (7.7)	8.6
3.1 Government Services	29.8 (14.9)*1	19.6 (11.5)	6.6 (2.6)	18.3 (8.2)*2	1.5 (9.6)	15.5 (10.0)	8.5
3.2 Private Services	34.9 (15.6)*1	16.4 (16.9)	3.3 (0.4)	17.5 (9.5)*2	9.1 (10.7)	11.2 (6.8)	8.6
Total	23.5 (5.3)*1	10.8 (15.2)	1.2 (2.5)	12.3 (8.5)*2	-4.1 (7.8)	12.6 (6.5)	0.0

Notes: 1) Figures in left column show the growth/changes of nominal GDP, and figures in parentheses show the growth/changes of real GDP in 1978 constant prices.

2) \*1 for 3 years of 1978-80

3) \*2 for 12 years of 1978-90

Source: Attachment 2.1 & 2.2

**Table 2-4 Domestic Savings and Capital Formation  
(1976-1990)**

	1976-80	1981-85	1986-90
<b>1 Domestic Savings and Gross Capital Formation (aggregated amount for 5 yrs.) (R.O. million)</b>			
1.1 Domestic Savings	2,844	6,195	6,608
1.2 Gross Capital Formation	1,682	3,894	2,946
- Private	495 (29.4%)	1,138 (29.2%)	941 (32.0%)
- Public	1,187 (70.6%)	2,756 (70.8%)	2,005 (68.0%)
<b>2 Average Annual Growth Rate (%)</b>			
2.1 Domestic Savings	21.2%	7.1%	0.5%
2.2 Gross Capital Formation	12.6%	13.9%	4.9%
- Private	26.2%	14.3%	-0.8%
- Public	8.0%	13.5%	10.5%
2.3 GDP	23.4%	10.9%	3.2%
<b>3 % to GDP</b>			
3.1 Domestic Savings	46.4%	43.2%	41.3%
3.2 Gross Capital Formation	27.4%	27.1%	18.4%

Source: Attachment 2.3 & 2.4

**Table 2-5 Domestic Savings and Capital Formation**  
**(1991-1992)**

	1991	1992
1 Domestic Savings (R.O. million)	1,037	1,206
2 Gross Capital Formation (R.O. million)	661	751
- Private	251 (38.0%)	249 (33.2%)
- Public	410 (62.0%)	502 (66.8%)
3 Annual Changes (%)		
- Domestic Savings	-27.2 %	+16.3 %
- Gross Capital Formation	+25.0 %	+13.6 %
- Private	+13.6 %	-0.8 %
- Public	+33.1 %	+22.4 %
- GDP	-3.3 %	+12.8 %
4 % to GDP		
- Domestic Savings	26.5 %	27.3 %
- Gross Capital Formation	16.9 %	17.0 %

Source: Attachment 2.3 & 2.4

**Table 2-6 Relative Share of Capital Formation by Type of Economic Activity (%)**  
(1976-1990)

	1976-80			1981-85			1986-90			1976-90		
	Pvt.	Publ.	Total	Pvt.	Publ.	Total	Pvt.	Publ.	Total	Pvt.	Publ.	Total
1 Productive Sectors	57.4	22.1	32.5	67.7	24.7	37.2	68.6	33.5	44.7	66.0	27.2	38.9
(Oil & Gas)	(39.9)	(19.0)	(25.1)	(50.7)	(18.0)	(27.6)	(52.6)	(29.8)	(37.1)	(49.3)	(22.2)	(30.4)
(Manufacturing)	(14.0)	(0.6)	(4.5)	(8.8)	(2.8)	(4.5)	(9.9)	(1.3)	(4.0)	(10.2)	(1.8)	(4.4)
2 Services Sectors	42.6	16.0	23.8	32.3	19.9	23.5	31.4	18.4	22.6	34.0	18.6	23.3
(Housing)	(37.8)	(2.4)	(12.8)	(24.9)	(3.6)	(9.8)	(21.1)	(3.3)	(9.0)	(26.0)	(3.3)	(10.1)
3 Infrastructure	0	61.9	43.7	-	55.4	39.2	-	48.1	32.7	0	54.2	37.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	(29.4)	(70.6)	(100.0)	(29.2)	(70.8)	(100.0)	(32.0)	(68.0)	(100.0)	(30.2)	(69.8)	(100.0)

Source: Attachment 2.3 (2)

**Table 2-7 Relative Share of Capital Formation by Type of Economic Activity (%)**  
(1991-1992 actual, and target of Fourth Five Year Plan (1991-1995))

	1991-92 actual			1991-95 target		
	Pvt.	Publ.	Total	Pvt.	Publ.	Total
1 Productive Sectors	64.3	40.4	48.9	71.8	40.4	50.4
(Oil & Gas)	(49.5)	(36.9)	(41.4)	(46.0)	(31.7)	(36.3)
(Manufacturing)	(9.8)	(0.7)	(3.9)	(14.1)	(6.0)	(8.6)
2 Services Sectors	35.7	19.9	25.5	28.2	16.9	20.6
(Housing)	(26.4)	(2.3)	(10.9)	(17.4)	(2.3)	(7.2)
3 Infrastructure	0	39.7	25.6	0	42.7	29.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
	(35.4)	(64.6)	(100.0)	(32.2)	(67.8)	(100.0)

Source: Attachment 2.3 (2), and Fourth Five Year Development Plan (P.178)

Table 2-8 External Trade

	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
(Unit: R.O. million)										
Total Exports (fob)	1,294	1,778	1,123	1,485	1,291	1,563	2,116	1,874	2,135	2,038
- Oil *	1,245	1,658	1,011	1,361	1,136	1,395	1,940	1,630	1,785	1,595
- Non-oil	4	23	27	39	63	67	69	79	97	123
- Re-export	45	97	85	85	92	101	107	165	253	320
Imports (cif)	598	1,089	917	701	846	868	1,031	1,228	1,449	1,582
Balance	696	689	206	784	445	695	1,085	646	686	456
% to Total Exports										
- Oil exports	96.2	93.2	90.0	91.7	88.0	89.2	91.7	87.0	83.6	78.3
- Non-oil exports	0.3	1.3	2.4	2.6	4.9	4.3	3.3	4.2	4.5	6.0
- Re-exports	3.5	5.5	7.6	5.7	7.1	6.5	5.0	8.8	11.9	15.7

Note: \* Including export of refined oil from Oman Refinery Co. for 1980-1992, but excluding export of refined oil for 1993

Source: Attachment 2.6

Table 2-9 Production and Exports of Crude Oil

	Production of Crude Oil (Mn. BBL)	Exports of Crude Oil		Average Export Value per Barrel	
		Volume (Mn. BBL)	Value (R.O. Mn.)	R.O./BBL *1)	US\$/BBL *2)
1975	125	125	488.1	3.90	11.31
1980	104	102	1,244.6	12.20	35.33
1985	182	165	1,597.0	9.68	28.02
1986	204	187	981.0	5.25	13.64
1987	212	197	1,328.0	6.74	17.53
1988	227	212	1,101.7	5.20	13.52
1989	234	216	1,346.4	6.23	16.21
1990	250	229	1,885.9	8.24	21.41
1991	259	235	1,575.1	6.70	17.43
1992	271	253	1,745.8	6.90	18.00
1993	287 *3)	267	1,600.0 *3)	5.99	15.59

Notes: \*1) Estimated on the basis of export volume and value

\*2) Calculated from the estimated export value per barrel in R.O. price by applying the official exchange rates of US\$1: R.O. 0.3454 up to the end of 1985 and US\$1: R.O. 0.3845 since Jan. 1986 onwards.

\*3) Estimated from available data

Source: Statistical Year Book, Monthly Statistical Bulletin

**Table 2-10 Structure of Non-Oil Exports by Main Category (%)**

	1988	1991	1992
1 Live animals & related products	39.5	26.9	21.3
2 Foodstuffs beverages, tobacco, vegetable products, animal/vegetable fats & oils	16.0	13.4	15.4
3 Mineral products	4.6	10.3	10.0
4 Products of chemicals & allied industries	2.1	5.0	4.8
5 Plastics, rubber & related products	1.0	2.6	1.6
6 Textiles & related articles	*	13.6	18.7
7 Basemetals & related articles	32.7	23.4	20.3
8 Other products	4.1	4.8	7.9
Total	100.0	100.0	100.0
Index of export value (1980 = 1)	13.8	17.3	21.2

Source: Attachment 2.7

**Table 2-11 Structure of Imports by Main Category (%)**

	1989	1992	1993
1 Food, live animals beverages, tobacco, vegetable/animal oil & fats	19.7	19.2	18.4
2 Crude materials inedible except fuels	0.6	1.1	1.9
3 Minerals, fuels, lubricants & related materials	2.1	1.9	3.1
4 Chemicals	5.8	5.3	5.4
5 Manufactured goods	20.2	16.7	15.6
6 Machinery & transport equipment	36.1	43.8	43.3
7 Others	15.5	12.0	12.3
Total	100.0	100.0	100.0
Index of import value (1980 = 1)	1.5	2.5	2.7

Source: Attachment 2.8

Table 2-12 Balance of Payments

	1985	1986	1987	1988	1989	1990	1991	1992
	(Unit: R.O. million)							
1 Trade Balance	555	113	707	385	654	1,042	594	636
2 Services & Private Transfers (Net)	-517	-496	-381	-514	-526	-562	-646	-753
3 Balance on Current Account	38	-383	326	-129	128	480	-52	-117
4 Balance on Capital Account	144	323	-43	134	44	-199	215	35
- Direct Investment	(52)	(51)	(12)	(34)	(43)	(54)	(57)	(22)
- Other Capital	(92)	(272)	(-55)	(100)	(1)	(-253)	(158)	(13)
5 Overall Balance	-1	-295	72	-147	138	137	221	49
(after adjustment of errors & omission)								

Source: Attachment 2.5



**Table 2-13 Estimate of Omani and Expatriate Labor Force  
(1975-1990)**

	Table Labor Force			Omani Labor			Expatriate Labor			Percentage of Omani Labor to Total (%)
	Number ('000)	Av. Ann. Growth (%)		Number ('000)	Av. Ann. Growth (%)		Number ('000)	Av. Ann. Growth (%)		
1975	209			135			74			64.6
1980	306	7.9		152	2.4		154	15.8		49.7
1985	505	10.5		192	4.8		313	15.2		38.0
1990	529	0.9		207	1.5		322	0.6		39.1

Source: Fourth Five Year Development Plan

Table 2-14 Government Revenue and Expenditure

	1985	1986	1987	1988	1989	1990	1991	1992	1992
	(Unit: R.O. million)								
1 Revenue	1,776	1,221	1,512	1,247	1,483	2,040	1,860	1,680	1,717
% of Main Sources:									
-Oil & Gas	(87)	(79)	(82)	(83)	(84)	(86)	(84)	(76)	(76)
-Duties & Taxes	(4)	(5)	(3)	(4)	(3)	(2)	(3)	(4)	(3)
-Others	(9)	(16)	(15)	(13)	(13)	(12)	(13)	(20)	(21)
2 Expenditure	1,928	1,887	1,609	1,567	1,666	1,887	1,868	2,259	2,198
3 Surplus (+) or Deficit (-)	-152	-666	-97	-320	-183	+153	-8	-579	-481
• Grants & Net Borrowing	+64	+216	-50	+88	+41	-169	+4	-29	-28
• Net Withdrawal from SGRF	+97	+492	+147	+232	-113	-164	-185	+80	+299
• Net Change in Government Accounts	+9	+42	0	0	-255	-180	-189	-528	-210

Source: Attachment 2.9

**Table 2-15 Growth Target for Gross Domestic Product (1991-1995) - Current Prices**  
(Fourth Five-Year Plan)

	Av. Ann. Growth Rate (%) 1990-95	% in Changes from Previous Year										% to GDP		
		1991	1992	1993	1994	1995	1990	1991	1992	1993	1994	1995	1994	1995
1. Oil Sectors	4.9	6.1	5.2	4.6	4.4	4.4	44.2	43.5	43.2	42.7	42.0	41.5		
1.1 Crude Oil	4.8	6.0	5.1	4.5	4.2	4.3	42.9	42.2	41.9	41.3	40.6	40.0		
1.2 Natural Gas	9.1	10.9	7.8	9.1	8.3	9.2	1.3	1.3	1.3	1.4	1.4	1.5		
2. Non-oil Sectors	7.3	8.9	6.7	7.0	7.0	7.0	55.8	56.5	56.8	57.3	58.0	58.5		
2.1 Commodity Sectors	11.2	15.5	9.4	10.4	10.5	10.2	13.1	14.1	14.5	15.1	15.8	16.4		
- Mining	11.1	15.4	6.7	12.5	11.1	10.0	0.4	0.4	0.4	0.4	0.4	0.5		
- Agriculture	6.6	6.8	6.4	7.0	6.5	6.1	2.5	2.4	2.4	2.5	2.5	2.5		
- Fisheries	9.8	10.8	9.8	8.9	10.2	9.3	1.0	1.1	1.1	1.1	1.2	1.2		
- Manufacturing Industry	12.7	12.6	12.9	12.5	13.0	12.7	4.2	4.4	4.7	5.0	5.3	5.6		
- Electricity & Water	7.0	5.8	7.3	6.8	7.9	7.4	1.4	1.4	1.4	1.4	1.5	1.5		
- Building & Construction	14.1	30.2	8.3	11.5	10.8	10.7	3.6	4.4	4.5	4.7	4.9	5.1		
2.2 Service Sectors	6.0	6.9	5.9	5.8	5.7	5.8	42.7	42.4	42.3	42.2	42.2	42.1		
- Government Services	3.5	3.4	3.6	3.6	3.5	3.5	17.4	16.7	16.3	15.9	15.6	15.2		
- Private Services	7.6	9.4	7.3	7.1	7.1	7.2	25.3	25.7	26.0	26.3	26.6	26.9		
3. Total	6.3	7.7	6.1	6.0	5.9	6.0	100.0	100.0	100.0	100.0	100.0	100.0		
GDP at Purchasers' Value	6.3	7.7	6.1	5.9	5.9	5.9								

Source: Attachment 2.10

**Table 2-16 Achievement of GDP in 1991-1993**  
(Reference to Target in Fourth Five-Year Plan)

	Achievement Ratio (%)*		
	1991	1992	1993
1 Oil Sectors	98.5	105.8	90.3
2 Non-oil Industry	99.4	100.2	95.6
- Mining	73.3	81.3	44.4
- Agriculture & Fisheries	106.7	99.3	92.3
- Manufacturing Industry	98.8	99.0	106.5
- Electricity & Water	114.5	113.6	90.5
- Building & Construction	91.7	99.5	92.6
3 Services Sector	108.0	115.2	118.2
4 GDP at Purchasers' Value	103.3	110.0	103.7

Note: \*Ratio of the actual figures against the target figures

Source: Attachment 2.1 & Attachment 2.10

**Table 2-17 Achievement of External Trades in 1991 & 1992**  
(Reference to Target in Fourth Five-Year Plan)

	Achievement Ratio (%)*		
	1991	1992	1993
1 Export of Goods	102.9	111.0	
- Crude Oil Exports	100.7	105.0	82.6
- Non-oil Exports	97.5	109.0	125.5
- Re-exports	135.3	187.4	216.2
2 Import of Goods	116.8	125.6	
3 Trade Balance	81.8	87.1	

Note: \*Ratio of the actual figures against the target figures

Source: Attachment 2.5 & Attachment 2.12

**Table 2-18 Achievement of Domestic Savings and Capital Formation Projected for 1991 & 1992**  
(Reference to Target in Fourth Five-Year Plan)

	Achievement Ratio (%)*	
	1991	1992
Domestic Savings	78.5	88.9
Gross Capital Formation	94.7	102.6
- Private	117.3	103.8
- Public	84.7	102.0

Note: \*Ratio of the actual figures against the target figures

Source: Attachment 2.4 & Attachment 2.11

# Attachment 2.1 Gross Domestic Product by Kind of Economic Activity-Current Prices

(1975 - 1993)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993*
	(Unit: R.O. million)																		
1 Oil Sectors	487	518	533	493	719	1,279	1,474	1,421	1,379	1,443	1,675	1,064	1,405	1,188	1,462	1,990	1,659	1,875	1,674
1.1 Crude Oil	487	518	533	491	713	1,267	1,456	1,402	1,353	1,409	1,639	1,025	1,362	1,144	1,417	1,943	1,609	1,820	1,613
1.2 Natural Gas	0	0	0	2	6	12	18	19	26	34	36	39	43	44	45	47	50	55	61
2 Non-Oil Sectors	238	372	422	464	583	800	1,045	1,222	1,389	1,630	1,802	1,771	1,642	1,780	1,821	2,150	2,312	2,594	2,796
2.1 Commodity Sectors	95	117	118	123	150	203	255	301	365	445	464	469	406	433	425	481	540	595	626
- Mining	0	0	0	1	1	1	3	4	6	7	9	9	8	14	17	12	11	13	7
- Agriculture	14	12	17	23	31	37	40	46	54	57	68	68	71	78	83	85	93	93	144
- Fisheries	6	6	7	8	9	15	21	20	27	32	26	28	35	46	34	49	51	51	
- Manufacturing Industry	2	4	7	9	12	16	27	40	67	91	82	103	111	123	137	152	168	190	230
- Electricity & Water	2	6	9	11	11	16	19	21	24	33	37	40	44	46	48	60	63	67	57
- Building & Construction	71	89	78	71	86	118	145	170	187	225	242	221	137	126	106	123	154	181	188
2.2 Service Sectors	143	255	304	341	433	597	790	921	1,024	1,185	1,338	1,302	1,236	1,347	1,396	1,669	1,772	1,999	2,170
- Government Services	53	69	90	109	138	195	261	305	360	424	478	496	510	535	549	659	670	773	839
- Other Services	90	186	214	232	295	402	529	616	664	761	860	806	726	812	847	1,010	1,102	1,226	1,331
3 GDP at market prices	725	890	955	957	1,302	2,079	2,519	2,643	2,768	3,073	3,477	2,835	3,047	2,968	3,283	4,140	3,971	4,469	4,470
Less: Imputed Banking Services	-3	-11	-13	-14	-19	-25	-39	-44	-50	-60	-64	-72	-71	-72	-82	-122	-93	-95	-98
Add: Customs Duties	0	5	5	4	7	9	11	15	22	32	41	37	27	30	30	33	40	48	44
4 GDP at purchasers' value	722	884	947	947	1,290	2,063	2,491	2,614	2,740	3,045	3,454	2,800	3,003	2,926	3,231	4,051	3,918	4,422	4,416

Note: \* Provisional

Sources: 1975-1988: Fourth Five Year Development Plan

1989-1992: Statistical Year Book, 1993

1993: Monthly Statistical Bulletin, 1994

**Attachment 2.2 Gross Domestic Product by Economic Activity - 1978 Constant Prices**  
**(1978 - 1992)**

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
	(Unit: R.O. million)														
<b>1 Oil Sectors</b>	493	460	438	500	502	593	636	765	869	926	995	1,022	1,093	1,125	1,194
1.1 Crude Oil	491	456	433	494	495	583	623	751	851	906	974	1,001	1,071	1,101	1,168
1.2 Natural Gas	2	4	5	6	7	10	13	14	18	20	21	21	22	24	26
<b>2 Non-Oil Sectors</b>	464	539	624	750	889	1,017	1,242	1,389	1,342	1,211	1,259	1,317	1,451	1,626	1,728
2.1 Commodity Sectors	123	140	170	198	235	314	401	464	486	417	443	435	478	552	571
- Mining	1	1	1	2	3	7	9	11	12	10	9	10	8	11	12
- Agriculture	23	31	34	35	37	45	53	66	62	63	71	75	78	87	84
- Fisheries	8	9	15	15	17	19	17	17	17	21	31	20	19	17	16
- Manufacturing Industry	9	10	12	21	30	38	56	83	81	84	87	88	101	111	116
- Electricity & Water	11	14	17	18	26	30	45	48	78	95	116	131	157	168	174
- Building & Construction	71	75	91	107	142	175	221	239	236	144	129	111	115	158	169
2.2 Service Sectors	341	399	454	552	634	703	841	925	856	794	826	882	973	1,074	1,157
- Government Services	109	137	144	170	177	204	236	248	239	260	263	277	282	309	340
- Private Services	232	262	310	382	457	499	605	677	617	534	563	605	691	765	817
3 GDP at market prices	957	999	1,062	1,250	1,391	1,610	1,878	2,154	2,211	2,137	2,264	2,339	2,544	2,743	2,922
Less: Imputed Banking Service Charges	-14	-18	-21	-32	-35	-41	-53	-58	-60	-58	-58	-67	-100	-78	-78
Add: Custom Duties	4	6	6	8	11	16	1,850	27	24	16	16	17	17	22	26
<b>4 GDP at producers' value</b>	<b>947</b>	<b>987</b>	<b>1,047</b>	<b>1,226</b>	<b>1,367</b>	<b>1,585</b>	<b>1,850</b>	<b>2,123</b>	<b>2,175</b>	<b>2,095</b>	<b>2,222</b>	<b>2,289</b>	<b>2,461</b>	<b>2,687</b>	<b>2,870</b>

Source: Statistical Year Book

**Attachment 2.3 (1) Expenditure on Gross Domestic Product at Purchasers' Value--Current Prices**  
(1975 - 1992)

Items	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Final Consumption	344	422	515	582	692	1,076	1,247	1,510	1,582	1,746	2,064	1,949	1,844	2,136	2,238	2,626	2,880	3,211
- Private (#)	115	181	246	310	337	577	591	795	802	938	1,126	1,020	930	1,180	1,262	1,081	1,485	1,476
- Public	229	241	269	272	355	499	656	715	780	808	938	929	914	956	976	1,545	1,395	1,735
2. Gross Fixed Capital Formation	258	317	289	274	336	466	584	707	737	913	953	898	564	511	444	529	661	751
- Private	50	57	70	88	120	160	194	225	207	261	251	246	164	158	152	221	251	249
- Public	208	260	219	186	216	306	390	482	530	652	702	652	400	353	292	308	410	502
Net Export/Import Balance of Goods & Services	120	145	143	91	262	521	660	397	421	386	437	-47	595	279	549	896	376	455
GDP at Purchasers' Values	722	884	947	947	1,290	2,063	2,491	2,614	2,740	3,045	3,454	2,800	3,003	2,926	3,231	4,051	3,917	4,417

Note: # Private final consumption including change in stocks.

Source: Statistical Year Book

### Attachment 2.3(2) Gross Capital Formation by Type of Economic Activity

(Unit: R.O. million)

	1976-80			1981-85			1986-90			1991/92		
	Pvt.	Publ.	Total	Pvt.	Publ.	Total	Pvt.	Publ.	Total	Pvt.	Publ.	Total
1 Productive Sectors	284.2	262.6	546.8	769.8	680.1	1,449.9	646.0	671.4	1,317.4	321.7	368.1	689.8
1.1 Oil & Gas	197.3	225.4	422.7	577.0	496.3	1,073.3	495.6	597.5	1,093.1	247.7	336.5	584.2
1.2 Manufacturing	69.1	6.9	76.0	99.9	76.5	176.4	93.1	25.8	118.9	49.0	6.5	55.5
1.3 Others	17.8	30.3	48.1	92.9	107.3	200.2	57.3	48.1	105.4	25.0	25.1	50.1
2 Services Sectors	210.7	189.7	400.4	367.7	549.0	916.7	296.0	368.3	664.3	178.6	181.9	360.5
2.1 Housing	187.0	28.2	215.2	282.9	98.6	381.5	199.2	66.5	265.7	132.1	21.3	153.4
2.2 Others	23.7	161.5	185.2	84.8	450.4	535.2	96.8	301.8	398.6	46.5	160.6	207.1
3 Infrastructure	-	734.0	734.0	-	1,526.8	1,526.8	-	962.7	962.7	-	362.0	362.0

Total-Gross Capital Formation	494.9	1,186.3	1,681.2	1,137.5	2,755.9	3,893.4	942.0	2,002.4	2,944.4	500.3	912.0	1,412.3
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Source: Statistical Year Book



**Attachment 2.4 Domestic and National Savings  
(1975 - 1992)**

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
	(Unit: R.O. million)																	
1 G.D.P. at Purchasers' Prices	722	884	947	947	1,290	2,063	2,491	2,614	2,740	3,045	3,454	2,800	3,003	2,926	3,231	4,051	3,917	4,417
2 Total Final Consumption	344	422	515	582	692	1,076	1,247	1,510	1,582	1,746	2,064	1,949	1,844	2,136	2,238	2,626	2,880	3,211
3 Domestic Savings (1-2)	378	462	432	365	598	987	1,244	1,104	1,158	1,299	1,390	851	1,159	790	993	1,425	1,037	1,206
4 Net Factor Income (Transfers)	-135	-148	-130	-111	-137	-212	-235	-238	-297	-350	-399	-336	-281	-406	-406	-419	-423	-574
5 National Savings (3-4)	243	314	302	254	461	775	1,009	866	861	949	991	515	878	384	587	1,006	614	632
6 % of Domestic Savings to GDP (3/1)	52.4	52.3	45.6	38.5	46.3	47.8	49.9	42.2	42.3	42.7	40.2	30.4	38.6	27.0	30.7	35.2	26.5	27.3
7 % of National Savings to GDP (5/1)	33.7	35.5	31.9	26.8	35.7	37.6	40.5	33.1	31.4	31.2	28.7	18.4	29.2	13.1	18.2	24.8	15.7	14.3
8 Gross National Product (GNP) (1-4)	587	736	817	836	1,153	1,851	2,256	2,376	2,443	2,695	3,055	2,464	2,722	2,520	2,825	3,632	3,494	3,843

Source: Statistical Year Book

# Attachment 2.5 Balance of Payments

	1980	1985	1986	1987	1988	1989	1990	1991	1992
	(Unit: R.O. million)								
1 Trade Balance	616	555	113	707	385	654	1,042	594	636
1.1 Merchandise exports (fob)	1,294	1,717	1,093	1,463	1,285	1,564	2,118	1,873	2,136
- Oil exports	1,244	1,597	981	1,339	1,130	1,396	1,942	1,629	1,786
- Others	50	120	112	124	155	168	176	244	350
1.2 Merchandise imports (cif)	-678	-1,162	-980	-756	-900	-910	-1,076	-1,279	-1,500
2 Services & Private Transfers (Net)	-323	-517	-496	-381	-514	-526	-562	-646	-753
3 Balance on Current Account (1+2)	293	38	-383	326	-129	128	480	-52	-117
4 Balance on Capital Account	52	144	323	-43	134	44	-199	215	49
4.1 Direct Investment	30	52	51	12	34	43	54	57	33
4.2 Other Capital	22	92	272	-55	100	1	-253	158	16
5 SDR Allocations	1	-	-	-	-	-	-	-	-
6 Errors & Omissions	-21	-183	-235	-211	-152	-34	-144	58	117
7 Overall Balance (3+4+5+6)	325	-1	-295	72	-147	138	137	221	49

Sources: Statistical Year Book, 1991 & 1992

Central Bank of Oman Quarterly Bulletin, March 1994

# Attachment 2.6 External Trade (1975 - 1992)

(Unit: R.O. million)

	Exports						Imports	Trade Balance
	Oil (Domestic)		Total	Non-oil (Domestic)	Re-Exports	Total Exports		
	Crude Oil	Refined Oil <sup>*1)</sup>						
1975	488.1	-	488.1	1.1	..	489.2	264.3	224.9
1980	1,244.6	-	1,244.6	4.6	45.3	1,294.5	598.2	696.3
1981	1,526.4	-	1,526.4	6.5	88.9	1,621.8	790.3	831.5
1982	1,409.6	-	1,409.6	7.7	109.5	1,526.8	926.5	600.3
1983	1,346.6	-	1,346.6	10.6	110.0	1,467.2	860.9	606.3
1984	1,401.0	-	1,401.0	17.2	109.3	1,527.5	949.2	578.3
1985	1,597.0	60.8	1,657.8	22.9	97.4	1,778.1	1,088.9	689.2
1986	981.0	29.8	1,010.8	26.6	85.1	1,122.5	916.7	205.8
1987	1,328.0	33.0	1,361.0	39.0	84.9	1,484.9	700.7	784.2
1988	1,101.7	34.7	1,136.4	62.9	92.1	1,291.4	846.4	445.0
1989	1,346.4	48.8	1,395.2	66.5	101.2	1,562.9	867.9	695.0
1990	1,885.9	54.3	1,940.2	68.8	107.4	2,116.4	1,030.9	1,085.5
1991	1,575.1	54.6	1,629.7	79.1	165.1	1,873.9	1,228.1	645.8
1992	1,745.8	39.3	1,785.1	96.7	253.5	2,135.3	1,449.2	686.1
1993	1,594.9	n.a.	1,594.9 <sup>*2)</sup>	122.5	320.3	2,037.7 <sup>*2)</sup>	1,581.8	455.9 <sup>*2)</sup>

Notes: <sup>\*1)</sup> Exports from Oman Refinery Co.

<sup>\*2)</sup> Excluding exports of refined oil

Sources: Statistical Year Book, 1991 & 1992; Monthly Statistical Bulletin, March 1994

**Attachment 2.7 Value of Domestic Non-Oil Exports  
(Excluding Re-exports)**

	(Unit: R.O. '000)				
	1988	1989	1990	1991	1992
1 Live Animals & Products Thereof	24,855	22,644	24,122	21,251	20,577
2 Vegetable Products	6,145	5,440	5,840	5,245	8,088
3 Animal or Vegetable Fats & Oils	17	51	672	2,249	3,181
4 Foodstuffs, Beverages, Tobacco & Products Thereof	3,904	5,121	2,857	3,063	3,623
5 Mineral Products	2,900	3,298	3,183	8,164	9,669
6 Products of Chemical & Allied Industries	1,311	1,843	2,867	3,954	4,703
7 Plastics, Rubber & Articles Thereof	628	559	826	2,081	1,565
8 Textiles & Articles Thereof	9	5	4,922	10,760	18,064
9 Base Metals & Articles Thereof	20,572	24,301	20,281	18,475	19,630
10 Other Products (N.E.C.)	2,553	3,310	3,286	3,826	7,613
<b>Total</b>	<b>62,894</b>	<b>66,572</b>	<b>68,856</b>	<b>79,068</b>	<b>96,713</b>

Source: Customs Department & Ministry of Development

**Attachment 2.8 (1) Value of Recorded Imports by SITC Sections**

	(Unit: R.O. '000)				
	1989	1990	1991	1992	1993
1 Food and Live Animals	149,440	164,853	171,545	182,478	189,341
2 Beverages & Tobacco	17,593	19,939	49,649	88,661	93,802
3 Crude Materials Inedible Except Fuels	5,346	5,178	11,108	15,909	29,962
4 Minerals, Fuels, Lubricants & Related Materials	18,550	41,433	22,035	27,793	48,521
5 Animal & Vegetable Oil & Fats	4,177	3,848	6,362	7,380	8,347
6 Chemicals	50,104	59,904	69,009	77,115	86,250
7 Manufactured Goods	175,083	189,808	230,019	241,317	246,056
8 Machinery & Transport Equipments	313,748	372,590	514,256	635,230	685,696
9 Miscellaneous Manufactured Articles	105,568	106,719	116,545	128,396	124,818
10 Commodities & Transactions not Classified Elsewhere	28,340	66,642	37,555	44,965	69,034
<b>Total</b>	<b>867,949</b>	<b>1,030,914</b>	<b>1,228,083</b>	<b>1,449,244</b>	<b>1,581,827</b>

From 1987 classification is based on harmonised system (H.S.) codes, data have been regrouped to maintain broad comparability of series at the group level for previous periods.

Source: Customs Department

**Attachment 2.8 (2) Recorded Imports by Main Category**

(Unit: R.O. million)

Years	Primary & processed food & beverages	Primary & processed industrial supplies	Fuels & lubricants	Machinery & other capital equipment, parts & accessories	Transport equipment & parts & accessories	Consumer Goods	Total
1980	77,890	139,770	64,586	86,911	116,085	97,059	582,301
1981	85,796	190,151	94,013	145,745	147,083	102,025	764,813
1982	100,291	226,800	93,928	194,384	174,851	107,635	897,889
1983	108,784	214,258	11,842	160,071	210,669	124,406	830,030
1984	122,430	249,430	19,274	187,551	176,526	146,956	902,167
1985	127,591	298,035	14,884	259,059	182,889	178,210	1,060,668
1986	131,086	228,805	23,232	255,257	114,998	136,583	889,961
1987	145,547	150,070	20,449	146,301	118,851	99,341	680,559
1988	148,693	217,396	12,775	142,719	141,310	128,587	791,480
1989	151,989	195,941	16,698	181,420	149,650	140,290	835,988
1990	164,755	237,511	40,709	173,363	192,021	155,938	964,297
1991	176,060	282,851	20,889	257,548	253,887	199,598	1,190,833
1992	189,265	306,574	25,884	256,461	374,444	251,679	1,404,307

Source: Statistical Year Book

Attachment 2.9 (1) Government Revenue &amp; Expenditure Classified by Major Items

		(Unit: R.O. million)													
		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1	Revenues	1,187.9	1,478.1	1,333.8	1,423.8	1,513.2	1,776.2	1,220.8	1,512.1	1,247.6	1,483.1	2,039.9	1,860.1	1,680.2	1,717.0
	1.1 Oil	1,095.5	1,341.3	1,215.7	1,277.5	1,304.6	1,510.0	928.9	1,194.9	993.6	1,197.4	1,701.6	1,515.7	1,275.8	1,302.9
	1.2 Gas	14.0	18.1	18.9	20.2	34.4	36.7	37.9	39.0	44.2	45.1	50.3	48.8	63.1	53.6
	1.3 Other revenue	78.4	118.7	99.2	126.1	174.2	229.5	254.0	278.2	209.8	240.6	288.0	295.6	341.3	360.5
2	Expenditure	949.8	1,223.8	1,412.9	1,546.9	1,760.3	1,928.3	1,886.8	1,609.1	1,567.3	1,665.8	1,887.4	1,868.1	2,258.7	2,197.7
	2.1 Defence & National Security	406.8	521.9	581.3	670.7	728.2	744.9	665.4	583.6	589.2	600.6	742.3	643.3	777.8	736.4
	2.2 Civilian Current Exp.	271.2	335.1	388.9	440.6	507.2	599.0	648.2	648.5	682.0	760.5	827.8	819.7	960.5	952.8
	2.3 Development Exp.	246.7	317.4	395.2	377.1	464.7	533.7	532.4	328.8	280.2	270.3	285.8	391.7	471.1	474.9
	2.4 Support to Private Sector	25.1	49.4	47.5	58.5	60.2	50.7	40.8	48.2	15.9	34.4	31.5	13.4	49.3	33.6
3	Surplus(+) or Deficit(-)	+238.1	+254.3	-79.1	-123.1	-247.1	-152.1	-666.0	-97.0	-319.7	-182.7	+152.5	-8.0	-578.5	-480.7
	3.1 Grants & Net Borrowing	+36.2	+100.5	+55.7	+213.5	+223.5	+64.6	+215.6	-49.5	+87.9	+40.8	-169.0	3.6	-29.4	-27.9
	3.2 Net Withdrawal from SGRF	-274.3	-215.9	-98.4	-89.9	-27.5	+96.8	+492.4	+146.5	+231.8	-113.0	-163.6	-184.4	+80.2	+299.4
	3.3 Net Change in Govt. Accounts	0.0	+138.9	-121.8	+0.5	-51.1	+9.3	+42.0	0.0	0.0	-254.9	-180.1	-188.8	-527.7	-209.2

Sources: Statistical Year Book, Monthly Statistical Bulletin

**Attachment 2.9 (2) Government Revenue Expenditure Classified by Major Items (1/2)**

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
(Unit: R.O. million)																		
<b>A Revenues</b>																		
Oil	373.1	454.7	482.2	457.7	634.6	1,095.5	1,341.3	1,215.7	1,277.5	1,304.6	1,510.0	928.9	1,194.9	993.6	1,197.4	1,701.6	1,515.7	1,275.8
Gas	0.0	0.0	0.0	2.8	4.3	14.0	18.1	18.9	20.2	34.4	36.7	37.9	39.0	44.2	45.1	50.3	48.8	63.1
Custom Duties	0.5	4.5	4.6	4.6	7.0	8.6	11.3	14.7	21.7	31.6	41.1	37.0	26.9	29.6	29.4	32.6	39.5	47.8
Corporate Income Taxes	2.1	4.6	5.9	6.0	5.6	6.5	10.5	11.4	18.7	20.4	26.4	25.6	21.2	23.4	16.0	14.4	18.3	19.9
Interest from Investments	2.8	3.2	6.7	5.9	6.9	19.8	38.6	14.2	9.2	21.3	19.6	25.1	30.5	8.5	8.5	7.5	9.3	9.6
Others	9.2	20.3	21.1	25.3	33.8	43.5	58.3	58.9	76.5	100.9	129.2	133.5	166.8	141.5	165.6	215.9	213.8	244.8
1 Revenue from Internal Sources	387.7	487.3	520.5	502.3	692.2	1,187.9	1,478.1	1,333.8	1,423.8	1,513.2	1,763.0	1,188.0	1,479.4	1,240.8	1,462.0	2,022.3	1,845.4	1,661.0
2 Repayment of Loans to the Government	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	13.2	32.8	32.7	6.8	21.1	17.6	14.7	19.2
3 Total Revenue (1+2)	387.7	487.3	520.5	502.3	692.2	1,187.9	1,478.1	1,333.8	1,423.8	1,513.2	1,776.2	1,220.8	1,512.1	1,247.6	1,483.1	2,039.6	1,860.1	1,680.2
<b>B Expenditures</b>																		
Current & Development Exp.																		
Current Expenditure	-	179.1	164.1	201.1	246.4	347.7	450.0	497.9	530.4	568.8	608.9	579.4	541.2	525.3	581.5	715.6	621.6	747.2
Development Exp. on Construction Projects of Civilian Nature	-	92.2	73.0	63.4	22.6	59.1	71.9	83.4	140.3	159.4	136.0	86.0	42.4	63.9	19.1	26.7	21.7	30.6
4 Total Defence & National Security Expenditures	241.0	271.3	237.1	264.5	269.0	406.8	521.9	581.3	670.7	728.2	744.9	665.4	583.6	589.2	600.6	742.3	643.3	777.8
Civilian Current Exp:																		
All Ministries	65.3	95.1	126.6	138.1	144.5	214.8	272.5	315.7	362.7	409.4	489.0	500.0	509.1	535.3	600.0	660.0	674.1	779.8
Interest on Government Loans	5.9	7.2	10.3	16.2	19.7	21.1	15.5	17.5	19.2	39.3	47.1	75.9	72.9	84.0	94.5	92.4	69.4	98.5
P.D.O. (Government Share)	10.3	12.3	14.9	18.6	24.1	35.3	47.1	55.7	58.7	58.5	62.9	72.3	66.5	62.7	66.0	75.4	76.2	82.2
5 Total Civilian Current Exp	81.5	114.6	151.8	172.9	188.3	271.2	335.1	388.9	440.6	507.2	599.0	648.2	648.5	682.0	760.5	827.8	819.7	960.5
Development Expenditures																		
All Ministries	156.8	181.1	130.4	89.0	129.4	168.9	241.0	289.0	290.7	374.0	433.7	363.1	230.0	203.8	176.5	163.0	241.2	320.4
P.D.O. (Government Share)	16.2	14.0	15.5	33.7	63.7	77.8	76.4	106.2	86.4	90.7	96.0	163.3	90.5	69.6	85.4	115.7	142.3	142.3
Exploration for Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	6.0	8.3	6.8	8.4	7.1	8.2	8.4
6 Total Development Expenditure	173.0	195.1	145.9	122.7	193.1	246.7	317.4	395.2	377.1	464.7	533.7	532.4	328.8	280.2	270.3	285.8	391.7	471.1



Attachment 2.9 (2) Government Revenue Expenditure Classified by Major Items (2/2)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
(Unit: R.O. million)																		
Support to Private Sector																		
Industrial Sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.2	2.8
International, Regional & Local Organization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	9.7	2.6	2.5	1.3	0.7	12.1	33.9	31.5	4.3	38.4
Concessional Loans to Private Sector*	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oman Housing Bank	0.0	-	-	-	-	6.2	0.7	14.6	8.2	4.0	9.0	7.1	7.0	2.0	0.0	0.0	6.0	6.0
Oman Development Bank	0.0	-	-	-	-	2.5	0.0	4.0	0.0	3.0	0.5	2.0	2.1	1.3	0.0	0.0	0.9	1.3
Oman Bank for Agr. & Fisheries	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	4.9	4.0	2.0	0.3	1.2	0.0	0.5	0.0	1.0	0.8
7 Total Support	0.0	0.0	0.0	0.0	0.0	8.7	5.5	19.2	22.8	13.6	14.0	10.7	11.0	15.9	34.4	31.5	13.4	49.3
8 Government Loans & Participation in																		
Local and Foreign Enterprises	14.0	4.7	22.4	25.0	11.8	16.4	43.9	28.3	35.7	46.6	36.7	30.1	37.2	0.0	0.0	0.0	0.0	0.0
9 Total Expenditure (4+5+6+7+8)	509.5	585.7	557.2	585.1	662.2	949.8	1,223.8	1,412.9	1,546.9	1,760.3	1,928.3	1,888.8	1,609.1	1,567.3	1,565.8	1,887.4	1,868.1	2,258.7
10 Surplus (+) or Deficit (-) (3-9)	-121.8	-98.4	-36.7	-82.8	30.0	238.1	254.3	-79.1	-123.1	-247.1	-152.1	-666.0	-97.0	-319.7	-182.7	+152.5	-8.0	-578.5
C Means of Meeting Deficit																		
11 Grants (Net)	+71.6	+18.0	+92.7	+6.7	+61.9	+35.2	+50.0	+14.7	+50.7	+72.8	-8.8	-0.3	+2.7	+15.8	+6.2	-21.7	-1.3	-6.0
Loans:																		
Long & Medium Term Disbursed	+64.0	+58.4	+52.7	+24.2	+40.5	+66.0	+89.0	+70.0	+191.0	+195.3	+125.4	+297.7	+123.0	+218.8	+231.9	+56.5	+147.1	+105.8
Long Term Repaid	-9.4	-15.9	-20.9	-34.4	-53.5	-65.0	-38.5	-29.0	-28.9	-44.6	-52.0	-81.8	-175.2	-146.7	-197.3	-203.8	-142.2	-129.2
12 Net Borrowing	+54.6	+42.5	+31.8	-10.2	-13.0	+1.0	+50.5	+41.0	+162.8	+150.7	+73.4	+215.9	-52.2	+72.1	+34.6	-147.3	+4.9	-23.4
13 Total (11+12)	+126.2	+60.5	+124.5	-3.5	+48.9	+36.2	+100.5	+55.7	+213.5	+223.5	+64.6	+215.6	-49.5	+87.9	+40.8	-169.0	+3.6	-29.4
14 Net Withdrawal from SGRF	0.0	0.0	0.0	0.0	0.0	-274.3	-215.9	-98.4	-89.9	-27.5	+96.8	+492.4	+146.5	+231.8	-113.0	-163.6	-184.4	+80.2
15 Net Change in Govt. Accounts (10-13+14)	+4.4	-37.9	+87.8	-86.3	+78.9	0.0	+138.9	-121.8	+0.5	-51.1	+9.3	-42.0	0.0	0.0	-254.9	-180.1	-188.8	-577.7

Source: Statistical Year Book

**Attachment 2.10 Gross Domestic Product Projected for 1991 – 1995 – Current Prices**  
**(Fourth Five-Year Plan)**

	(Unit: R.O. million)				
	1991	1992	1993	1994	1995
1 Oil Sectors	1,684	1,772	1,854	1,935	2,021
1.1 Crude Oil	1,633	1,717	1,794	1,870	1,950
1.2 Natural Gas	51	55	60	65	71
2 Non-oil Sectors	2,183	2,330	2,492	2,666	2,853
2.1 Commodity Sectors	543	594	656	725	799
- Mining	15	16	18	20	22
- Agriculture	94	100	107	114	121
- Fisheries	41	45	49	54	59
- Manufacturing Industry	170	192	216	244	275
- Electricity & Water	55	59	63	68	73
- Building & Construction	168	182	203	225	249
2.2 Service Sectors	1,640	1,736	1,836	1,941	2,054
- Government Services	646	669	693	717	742
- Private Services	994	1,067	1,143	1,224	1,312
3 Total	3,867	4,102	4,346	4,601	4,875
Less: Imputed Banking Services	-109	-115	-123	-131	-137
Add: Custom Duties	34	35	37	39	40
GDB at Purchasers' value	3,792	4,022	4,260	4,509	4,777

Source: Fourth Five-Year Plan

**Attachment 2.11 National Expenditure Projected for 1991 - 1995 - Current Prices**  
**(Fourth Five - Year Plan)**

	1991	1992	1993	1994	1995	Total	(Unit: R.O. million) % of (4)
1 Final Consumption	2,471	2,665	2,843	3,026	3,218	14,223	
- Private	1,432	1,588	1,729	1,873	2,025	8,647	
- Public	1,039	1,077	1,114	1,153	1,193	5,576	
2 Gross Capital Formation	698	732	802	884	981	4,097	19.2
- Private	214	240	249	281	335	1,319	
- Public	484	492	553	603	646	2,778	
3 Next Export / Import Balance	623	625	615	599	578	3,040	
- Exports	1,826	1,929	2,028	2,127	2,234	10,144	
- Less: Imports	-1,203	-1,304	-1,413	-1,528	-1,656	-7,104	
4 GDP at purchasers' value	3,792	4,022	4,260	4,509	4,777	21,360	100.0
5 Domestic Savings (4-1)	1,321	1,357	1,417	1,483	1,559	7,137	

Source: Fourth Five-Year Plan

**Attachment 2.12 Balance of the External Current Account Projected for 1991-1995**  
**(Fourth Five - Year Plan)**

	(Unit: R.O. million)				
	1991	1992	1993	1994	1995
1 Balance of Trade	726	730	721	706	686
1.1 Export of Goods	1,821	1,924	2,023	2,122	2,229
- Crude Oil Exports	1,618	1,700	1,777	1,851	1,931
- Other Exports of Goods	81	89	98	108	119
- Re-exports	122	135	148	163	179
1.2 Imports of Goods	1,095	1,194	1,302	1,416	1,543
2 Balance of Services	-103	-105	-106	-107	-108
3 Net Income from Investment	-78	-92	-95	-106	-98
4 Net Transfers of Workers	-386	-411	-435	-462	-489
Balance of External Current Account	159	122	85	31	-9

Source: Fourth Five-Year Plan





### 3 Industrial Sectors

*This chapter analyzes the current state of industrial sectors in the country in an attempt to identify new development and growth opportunities. It should be noted however, that detailed characteristics of local industrial subsectors are presented in the Annex 1<sup>1)</sup>.*

#### 3.1 General

##### 3.1.1 Industrial subsectors in Oman

Promotion of the industrial sector in Oman has become full-fledged under Royal Decree No.1/79 (Organization and Promotion of Industries) issued in 1979. During the First Five-Year Plan period (1976 – 1980), various food processing plants, including flour milling, production of dates, and processing of sea food were constructed under government initiative. Also, construction of large-scale industrial plants such as a cement mill, a copper smelting plant, and an oil refinery were commenced.

As a result, the manufacturing sector that used to account for less than 0.3% of GDP in 1975 started to grow in the 1980s, by 2.3% in 1985, 3.7% in 1990, and 4.3% in 1992.

According to 1992 data, the manufacturing sector accounted for 32% of the non-oil production sector which also includes mining, agriculture, fishery, utility, and construction. Between 1980 and 1992, the sector recorded an annual average growth of 22.9%, far exceeding the growth achieved by the entire production sector of 9.3% and 10.3% of the non-oil production sector.

On the other hand, capital formation in the manufacturing sector has remained either more or less unchanged, or showing a gradual downturn as follows: 4.5% between 1976 and 1980, 4.5% between 1981 and 1985, 4.0% between 1986 and 1990, and 3.9% between 1991 and 1992.

The initial stage of industrial development was led by the government sector, explaining why 43% of total capital formation in the manufacturing sector came from the public sector between 1981 and 1985. Then, partially due to the decline in oil revenue, the public sector's share dropped to 21.7% between 1986 and 1990, and 11.7% in 1991–1992.

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<sup>1)</sup> For the purpose of industrial sector analysis in this chapter, the ISIC code is used for subsector classification. However, since the trade statistics uses HS code, the import and export data were recompiled according to the ISIC codes for the study purpose.

### 3.1.2 Investment trends

Table 3-1 shows yearly changes in industrial investment by subsector<sup>2)</sup>. In terms of the amount of investment attained in each of Five-Year Plan periods since 1975 when the industrialization process started, recorded investments during the second and third (2nd and 3rd) Five-Year Plan periods have been most brisk. In 1991 and 1992 which is the first half of the Fourth Five-Year Plan, annual average industrial investment declined sharply to RO. 16 million from RO. 35 million, during the Second and Third Five-Year Plan periods.

Looking at investment during the Second Five-Year Plan period, non-metal mineral products stood out with a 55.5% share. This is attributable to active public investment made during the period, which in turn spurred investment in construction material industries, including cement and aggregates. The chemical and petroleum sector received the second largest investment, accounting for 30.6% of total, as a result of government-led investment in the petroleum refining sector during the period.

During the Third Five-Year Plan period, the largest portion of industrial investment, 51.1%, went to the basic metal sector. This reflects major government investment projects in copper smelting (1 company), and aluminum products (1 company).

During the first half of the Fourth Five-Year Plan period in 1991 and 1992, industrial investment declined sharply due to the cessation of investments from large projects for basic industries which had already been seen in the period covering the Second and Third Five-Year Plan. The investment in the food and beverage sector recorded a relatively steady increase even in the Fourth Five-Year Plan period, while that in the textile and apparel sector remained more or less unchanged from the previous period. On the other hand, non-metallic mineral products, and chemicals and chemical products received less investment, but continue to hold relatively large shares, 18.2% and 17.0% respectively. In the non-metallic mineral sector, investment in construction materials continued due to its demand for private building and housing construction projects. This partly compensated for the investment decline in public works. The chemicals and chemical products sector kept momentum with the production of plastic bags utilized as shopping bags, the demand for which was due to the changes in the distribution and retail industries.

### 3.1.3 Size distribution of industrial establishments

Table 3-2 shows the number of establishments by industrial subsector and size of

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<sup>2)</sup> All the values are expressed in current price basis since no data is available in real terms.



capital investment. Of 2,799 enterprises<sup>3)</sup> registered in the country, the non-metallic mineral product industry accounts for 41% (1,142 enterprises), woodworking 27% (759), and metal products 20% (550). These 3 subsectors account for 88% of total, and are comprised of numerous small and medium enterprises, and micro enterprises, while only 49% of 286 companies represent establishments with a capital of over RO.100,000.

### **3.1.4 Local markets and industrial subsectors**

Estimated production<sup>4)</sup>, and actual exports and imports by industrial subsector are shown in Table 3-3. Measured by domestic market size, metal products subsector is the largest sector, earning RO. 500 million, followed by chemical products and petroleum products subsector (RO. 280 million each), and food and beverages subsector (RO. 250 million).

Table 3-3 estimates the self-sufficiency rate of each subsector. Non-metallic mineral products subsector shows the highest self-sufficiency rate of 84%. On the other hand, subsectors with low self-sufficiency rates are basic metals (7.3%), metal products (6.7%), and food and beverages subsectors (16.0%), except for other manufacturing products subsector.

The largest subsector by value of imports for domestic consumption, excepting imports for re-exports, is metal products subsector (RO. 469 million as of 1992), followed by food and beverages subsector of RO. 244 million. Subsectors with annual imports over RO. 100 million are those of chemicals and chemical products, basic metals, and other manufacturing products.

Table 3-4 classifies imports (on a value basis) by production source (subsector) and purpose of consumption<sup>5)</sup>. So far as industrial products are concerned, finished products account for only 19.1% of total imports, but this figure does not include transportation equipment (mostly motor vehicles), and parts that represent 28.5% of total. Thus, while import substitution in the country as a whole, appears to have progressed to a significant

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<sup>3)</sup> Number of registered establishments at the end of 1992 was 3,749. Since no breakdown figure is available for this data, the following analysis is based on computer output of MCI on 2,799 registered establishments available as of November 1993, which is given in Table 3-2.

<sup>4)</sup> The data on industrial production by subsector is not available, and the data available about production is that of annual production of the companies on the year when they registers. The total compounded figure from this annual production up to the year in question was used as a substitute for the yearly production data.

<sup>5)</sup> Since the table excludes the value for category not known, the total does not tally with the total from the above table.

degree, domestic industries still play a minimal role in automotive and related sectors. Besides this, substantial importation of 43.3% of total is seen to have been comprised of raw materials for industrial production and machinery and parts.

## **3.2 Sectoral Trends**

### **3.2.1 Food and beverages**

The food industry in Oman consists of oil and fats, bakery products, snack food and confectionery production, soft drink and mineral water, in addition to an ordinary processing industry of grain mill products, meat, fishery products, vegetables and fruits. Among them, only the fish processing/canning industry is located near production sources, while other subsectors are mostly located near their markets. Fish processing is the sole subsector mainly targeted for the export market.

The extent of processing is relatively limited in most of subsectors, which mainly produce ordinary food materials. Only few of them develop their own products in response to market needs.

About 207 manufacturing enterprises are registered in the food and beverage industry. 25% or 52 enterprises have a capital of RO.100,000 or over. These relatively large enterprises have successfully introduced technology, equipment and experts from foreign countries at an early stage of operation. They are now manufacturing relatively high quality products, which are distributed to the domestic market, or are exported when a surplus arises. However, most of them relied on foreign companies for technology transfer but only at the initial stage where expatriate engineers are depended upon for operations.

There are 104 small enterprises and micro enterprises with a capital of RO.25,000 or less, accounting for 50% of total. 60 enterprises of these are bakeries, 23 are flour mills, and 20 are engaged in spice and coffee milling and packaging.

Medium-size enterprises with a capital between RO.25,000 and 100,000 totalled 51 (25% of total), of which 29 are bakeries. 13 enterprises are classified to have been engaging in other food products, which are relatively large enterprises producing ice and confectionery. The small and medium-size enterprises on the other hand are engaged in ice and confectionery production, milling and repacking of spice, coffee and beans. The remaining 9 enterprises are catering in the areas of meat processing, dairy products, fish processing/canning, and soft drink production. Many of them have a capital of RO.50,000 or more, and their characteristics are similar to those of the above-mentioned enterprises with a scale of RO.100,000 and over. The only main difference is that these latter enterprises serve local demand.

(1) Meat processing

The value of locally produced processed meat products (excluding meat not to be processed) accounts for more than 55% of the local demand<sup>6)</sup>. In practice, however, local products maintain a market share of 20% or less<sup>7)</sup>.

Under these circumstances, a new investment project cannot be expected in the industry unless local demand for meat processing products grows significantly.

(2) Dairy products

Oman imports RO. 27 million worth of dairy products annually. Those not produced locally, such as butter and cheese, are mainly imported from Europe and Australia. On the other hand, locally available products compete with imports from the UAE and other GCCs. In fact, they face strong competition from the GCC products, making domestic market share below 30%, as estimated by the largest local supplier. Two GCC-based dairy companies have established their own distribution channels within Oman.

The weak foundation of the domestic dairy industry is directly reflected in the current state of the dairy product industry. In light of the fact that the production base in the UAE has similar weakness, Oman therefore, has opportunity to accomplish further import substitution and export promotion in this subsector.

(3) Vegetable and fruit processing/canning

Again, the low productivity of the agricultural sector in the country inhibits large-scale, stable supply of vegetables and fruits for processing. At the same time, one should take notice of the fact that vegetables and fruits are supplied by only a dozen of large farms which also do processing, and constitute major portions of foodstuff that are successfully exported from the country. This suggests that a small-scale food processing operation that uses reliable supply sources, and serves specialized demand may become feasible since it is easier for farms to grow vegetables and fruits according to customer demands. However, the quality of products is not particularly high compared to competing products from Syria, Jordan, and Egypt. In addition to the need for quality improvement, the amount and type of supply varies greatly with seasons, so that the capacity of food processing plants has to be carefully determined to allow the adoption of a low operation rate on certain seasons.

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<sup>6)</sup> Estimated on the basis of information obtained from the industry.

<sup>7)</sup> Estimated on the basis of information obtained from the industry.

(4) Fish processing

Almost all of fish processing companies in the country have been established to export fishery resources available in the country. Their geographical distribution is relatively dispersed along the coast where fishery resources are most abundant.

The unstable fish catch is the major problem of the fish processing industry. It still has to be modernized otherwise, it may not be able to have sufficient catch that meets the required processing capacity. Also, many catches are wasted further reducing supply. The shortage of raw materials for the fish processing industry always presents a risk of a sudden cost increase, which discourages the industry to invest in more advanced processing facilities. On the other hand, diversification of products to include fish meal is hindered by various problems as insufficient surplus catch by the fishing industry.

While perceived abundance of fishery resources in Oman is ascertained, fish exist in diverse types while other marine life attracts most of attention. Accurate estimate of fish resources has not been done. Thus, future prospects for the fish processing industry in the country can only be determined after available fish resources are identified accurately, and as the fishing industry's post-catch process moves toward modernization.

(5) Oil and fat processing

In this subsector, import substitution has nearly reached its limit. Together with a very high ratio of raw material cost from total costs, a new development project cannot be expected for this industry.

(6) Grain mill products

Import substitution has also been completed mostly in this area. A major issue instead, is the increase in operating rate of the processing capacity, which is 70% at present. Clearly, it will depend heavily on export growth (currently 10% of production on a value basis) and development of domestic and export demand for tertiary processed products. The latter shows high potential, albeit quantity is not very large.

(7) Beverages

In the country, there is a mineral water manufacturer, a juice producer using fresh fruit juice, and fruit juice (or essence)-based soda drink makers.

Oman imports RO. 17 million worth of beverages annually. In total, non-alcohol beverages, excepting mineral water (RO.165,000), amount to RO. 11.33 million. Of this amount, RO. 10.28 million corresponds to importation from the UAE. These beverages are mostly produced and supplied by multinational corporations (MNCs), indicating their formidable market power.

(8) Chocolate products

Domestic demand for chocolate products is estimated at around 4,000 tons annually, of which 60% – 65% cater to the low-end market where local products and foreign products imported from the GCCs are competing. Consumers in the low-end market are price conscious, and the quality of products is mostly poor.

On the other hand, the high-end market is quality conscious, and there is only one leading domestic supplier serving the market, which accounts for around 15% of total. The remaining market is controlled by several MNCs.

(9) Other food products

49 enterprises are classified under the "other food products" category. Those with a capital of RO.100,000 or over are mainly making ice, snack food and confectionery. Also included are repackers of tea bags, coffee, salt, tomato powder, spice, and rice.

This is the area directly affected by recent changes in lifestyle resulting from an increased demand for snack food and similar products in Oman and other GCCs. Foreign people working in these countries have contributed to the increase in consumption of these food products; Consumer taste in the GCC markets directly reflects that in India, however, India is not likely to become a competitive exporter of these products, because: (1) package production facilities in the country are outdated for economical production; (2) imported package materials are costly due to high tariff rates, and (3) even if export-grade packages are produced, exports of small products in large quantities take a long period of time because of customs clearance. Thus, local companies in Oman have the opportunity to produce snack food and confectionery for the domestic market, as well as for other GCCs.

### **3.2.2 Wood products and furniture**

The wood product and furniture sector is generally divided into (1) wood milling and working, (2) manufacture of wooden and cork products, and (3) manufacture of wooden furniture.

There are 585 enterprises registered under this category, and 94% (551) are small enterprises or micro enterprises with a capital of RO.25,000 or less. On the other hand, there are only 8 enterprises with capital of RO.100,000 or over, all located in Muscat.

Only one enterprise is registered in the wooden and cork product subsector, having a capital of RO.25,000 or less.

There are 173 registered enterprises in the furniture production category (metal furniture is classified as metal products, thus not included here), of which 159 (92%) are small enterprises or micro enterprises with RO.25,000 or less. Most of these small furniture makers focus on "custom-made" business to produce relatively small furniture for local customers in communities they are operating. The manufacture of furniture involves a lot of manual work, and these makers use only simple woodworking machinery and employ mostly foreign workers. Although some of foreign craftsmen have brought various techniques, indigenous woodworking techniques form the basis of the small furniture production.

The furniture producers are served by small wood mills mentioned earlier, and are concentrated on the A'Sharqiya district, mainly Sur, as well as in Muscat. While other manufacturers are mainly found in Muscat only.

Large furniture makers with a capital of RO.100,000 or over, on the other hand, conduct their business in a different manner from smaller ones. Since most of them have started their business as furniture importers, they still sell imported furniture in addition to their own brands. While some of them are oriented towards marketing of manufactured furniture in stores, most of them are more or less characterized as contractors specialized in interior furnishing work and supplying furniture for hotels, commercial buildings, and large mansions.

They adopt management techniques and production technology from industrialized countries, import materials from various countries, and design and manufacture products by themselves. Their products are excellent in design and quality and are exported to foreign customers in GCCs on a contract basis.

These companies were established and have been growing rapidly during the construction boom in the country. As construction activity becomes sluggish in recent years, some of them were faced with business decline.

On the other hand, smaller enterprises which can serve the demand of local communities can only expect moderate market expansion due to the rise in personal income and the changes in lifestyle. There is little prospect for future improvement in design and quality.

Large companies have high potential to export high-grade furniture and parts by using their design and production capabilities. The key to international competitiveness in this case lies in availability of wood materials (hardwood in particular), i.e., whether they can

secure reliable supply sources<sup>8)</sup> .

Theoretically, resumed growth of large companies based on export drives would produce a trickle-down effect to small enterprises which can serve as subcontractors or suppliers. However, given their limited quality consciousness and the surplus production capacity of large companies, it is difficult to expect such vertical linkage to be established for the time being.

### **3.2.3 Textile and apparel**

The textile and apparel industry in Oman is categorized into textile manufacturers processing imported yarn into cloth, consignment processors of exported apparel products based on a contract with foreign buyers, and tailors mainly serving the domestic market.

Three enterprises are registered in the textile category. Only one company has a textile manufacturing plant using modern equipment, while the other company manufactures tent cloth. Another one operates a small shop with a capital of RO.25,000 or less. In addition to these registered manufacturers, there are some home manufacturers supplying hand-made textile products<sup>9)</sup> .

The sole textile plant weaves cloth using imported yarn, for distasha and other products of Oman and other GCCs. It is also the only plant in the GCCs weaving cloth on a commercial scale utilizing modern facilities and equipment. However, it faces intensive competition with imported products, but manages to hold a 20% share of the domestic market.

The largest number of registered enterprises is found in the consignment processing business, which is further divided into the sewing of buyer-designed cotton/synthetic fiber cloth furnished by buyers, and the knitting operation. Of the 30 enterprises registered, 24 have a capital of RO.100,000 or over, and most of the remaining enterprises with RO.75,000 or larger. Only 5 enterprises have been clearly identified as knitted garments makers<sup>10)</sup>.

Consignment processing is mostly directed to the US market. This is a move to take advantage of the import quota allocated by the US to Oman. Most of products are shipped to middle and low-end markets, and are sold at supermarkets or discount stores in the US.

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<sup>8)</sup> The possibility was studied in 4.4.3 of Annex 4.

<sup>9)</sup> Ministry of Heritage operates small scale weaving factory equipped with Chinese automatic weaving machine for the purpose of preserving traditional industries.

<sup>10)</sup> It is difficult to identify the product of enterprise exactly from the company list which indicate a classifications as Ready-made garments manufacturers or Knitted garments manufacturers.

These products are sewn by foreign workers from Sri Lanka and India. Their wages are presumably much higher than in their home countries.

Under the NAFTA, low-cost products from Mexico, not subject to import quota, are expected to flood the US market thus, it will become increasingly difficult for products finished in Oman to maintain their sales. Possible measures include, (1) to enter the EC market; (2) to explore a high-end market by manufacturing high-grade products by improved design and quality control, and; (3) to manufacture children's cloths and women's dresses, which are currently imported in large quantities for domestic and GCC markets. Dependence of this industry on the foreign skilled-labor and its availability may ensure the supply of quality labor, making market diversification feasible despite high labor costs relative to the wages of workers in their home countries.

#### **3.2.4 Paper and paper products, and printing**

Due to limitations of forest and water resources, the paper and pulp industry is not likely to establish itself in the country. The paper product industry in this country consists of secondary or tertiary processing of imported paper, and printing.

Nine enterprises are registered in the paper processing and paper product sector. They are generally large in size, five of which have a capital of RO.100,000 and above. As seen in other manufacturing sectors, they mainly serve domestic demand and have acquired technology, machinery, and engineers from foreign partners.

While 5 enterprises are manufacturing packaging containers such as paperboard cartons, 4 are supplying paper products such as printing paper, notebook, tissue paper, and paper diaper. As for paper products, there might be some new business opportunities for paper tableware such as cup and dish, both in the country and other GCCs, although competition with the UAE and other GCC countries is inevitable.

Growth of demand for packaging containers and paper products can be expected only with the expansion of industrial activity, the rise in personal income, changes in lifestyle, and increased demand for printing and publication.

The printing industry in the country has grown through a relatively high level of printing technology due to the absence of restriction on imports of ink, paper and other materials, as well as printing machinery and equipment. Thirty enterprises are registered in this category. 16 have a capital of RO.100,000 or over, 9 with RO.50,000 and above, and only 5 with less than RO.50,000. In the entire GCC region, more than 200 enterprises are in printing business and are competing intensely.



Again, growth of printing demand depends heavily on the expansion of industrial activity. Already, the printing industry on the basis of domestic demand, can be regarded as fully established in Oman.

Thus, the industry's future growth potential lies in export markets as it offers high quality service, particularly outside the GCCs, such as India and African countries on the east coast.

### **3.2.5 Chemicals and chemical products industry**

There are 48 enterprises registered in the chemicals and chemical products manufacturing sector. Thirty-eight have a capital of RO.100,000 or more which seems to have been established for the purpose of attaining import substitution.

Given a limited size of domestic demand, the number of enterprises in most of subsectors is relatively small, ranging between 1 and 4, excepting industrial chemicals (9 enterprises), soap/perfumes/cosmetics (9), and plastics (11).

Generally, chemicals and chemical products' demand grew with expansion of industrial activity. In a country with limited industrial concentration like Oman, however, high growth potential can be expected in chemical products used as household goods and packaging containers, as well as industrial products and parts.

Packaging containers include plastic bottles, films, injection molded products, and plastic bags used for shopping. Plastic bottles are often produced by major bottling companies themselves. As demand grows further however, specialized bottle makers may be expected to emerge in the future. There is no local production of high grade packaging films, but plastic bags for shopping began to be manufactured in various parts of the country to meet increased demand.

Production of some molded products for household are undertaken locally. Production of pipes and fittings used as construction and farming materials have also been started in recent years. Since domestic demand alone is too small judging from the present level of imports, new business opportunities should be geared at least towards GCCs despite a foreseen intense competition.

*Apart from the above, there are a number of manufacturers who are engaged in manufacturing of glass fiber reinforced products such as tanks and boats<sup>11)</sup>.*

Plastic processing products suitable for relatively small production include plastics for construction materials and thermoset molds for electrical appliances. These products are mostly imported at present, and demand for their components may only ramp up when the

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<sup>11)</sup> These manufacturers are classified under non-metal mineral products subsector according to ISIC code.

local assembly is started.

### **3.2.6 Non-metallic mineral products**

Enterprises registered in the non-metallic mineral product sector are divided into 4 subsectors, namely: (1) glass, (2) structural clay, (3) cement, lime, and plaster, and (4) others. All of the subsectors manufacture mainly construction materials. Also, they heavily utilize domestic resources.

There are 18 enterprises in the glass manufacture industry, of which 5 have a capital of RO.100,000 or over. All these large enterprises but one manufacture glass fiber products such as tanks and boats. The other produces ornament glass for building. Other smaller enterprises are presumably producing mirrors, small glass products, and glass fiber products. These manufacturers mainly employ manual processing, and have potentiality to further diversify products depending on the expansion of domestic demand.

There is no local production capacity for glass bottles and containers. Although domestic markets are not very large, imports of glass bottles<sup>12)</sup> have reached almost 18,000 tons annually. In addition, demand for carbonated beverages increased recently and glass bottles remain to be preferred than cans. Therefore, if demand in the GCCs is added, an appreciable demand can justify a minimum level of local production. Such production is also desirable from the standpoint of the optimal use of domestic resources and in preventing the emergence of environmental problems. On the other hand, domestic demand for flat glass seems to be too small to support domestic production.

In the structural clay manufacture subsector, only one enterprise is registered. However, there must be a number of small and medium-size enterprises as well as micro-scale enterprises which manufacture bricks, blocks and similar products.

Five enterprises are engaged in the manufacture of cement and lime, and 4 of them have a capital of RO.100,000 or over, including 2 leading cement manufacturers and a lime producer. The cement manufacturers are partly exporting owing to the growing foreign demand. Because neighboring countries have also established their respective cement industries, expansion of domestic demand, which is likely to be stable in the future seems to hold the key to further growth of this subsector.

There are 1,118 enterprises registered as manufacturers of other non-metallic mineral

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<sup>12)</sup> Importing bottled beverage is not included.

products. This category is comprised of diverse product types, as will be discussed later, but it has basically grown with the rise in construction demand in the country. 954 enterprises (85% of total) are very small, having a capital of RO.25,000 or less. At the same time, 80 enterprises (7%) are operating with a capital of RO.100,000 or larger.

Aggregate business is mostly done by large enterprises (33), a clear indication of the capital-intensive nature of the subsector. At present, the industry is mainly serving domestic demand. The lack of major aggregate resources in the GCCs, excepting the UAE, suggests future growth opportunity to establish itself as an export industry.

In contrast, concrete block manufacturers are dominated by medium-size enterprises, while ready-mix concrete is only supplied by large enterprises. In addition, 15 enterprises manufacture tiles and mosaic tiles for buildings.

Marble is produced by 4 enterprises with a capital of RO.100,000 and over, and 1 firm with capital ranging between RO.75,000 – 100,000. Again, they are mainly serving domestic demand and export small sized marble at present, but can grow into an export industry in the future.

In addition to the above subsectors, the non-metallic mineral product sector includes the ceramic industry. No enterprise is registered for such activity in this country. However, there are small, family-owned enterprises which make ceramics with traditional craftsmanship. The Ministry of Heritage is operating small shops which use machinery and employ craftsmen from China for the purpose of preserving this industry. Nevertheless, ceramics manufactured at these shops are made from locally available clay, and have been commercialized with the help of Chinese craftsmen only recently. Before that, there were only unglazed pottery with small commercial value. Since clay suitable for commercial ceramic products is not available in abundance, little growth opportunity is found in the subsector.

### **3.2.7 Metalworking industry**

550 enterprises are registered in the fabricated metal products industry. Only 37 (7% of total) are relatively large in size (RO.100,000 or over) while 451 (more than 80%) have a capital of RO.25,000 or smaller.

Generally speaking, larger enterprises (mainly RO.75,000 or larger) have introduced relatively modern machinery and technology, and served the local market, as well as the export market. On the other hand, many of the smaller enterprises including the micro enterprises (RO.50,000 or smaller) mainly serve local demand in small quantities, and engage in workshop-type of operations involving manual processing and utilizing a

limited number of simple machinery.

Of the 550 enterprises, 507 belong to two subsectors, structural metal products and fabricated metal products. When 20 enterprises in the metal furniture industry are added, these 3 subsectors altogether account for 96% of total.

Most of enterprises in these subsectors import general steel or aluminum materials, process them into products through simple sheet metal working, welding, and coating (machining included for some products). Value added is generally low, and the material cost accounts for 65% – 75% of total production cost. Products are mainly consumed by the construction industry.

In subsectors other than the above three, only a few enterprises are registered.

Enterprises registered in each subsector normally hold a 60% – 85% share of domestic demand accounting for their business base, and export 30% – 45% of total production to the GCCs. Oman have to compete with products imported from the GCC, but they generally maintain a higher range of market share by offering quality products. Also, many of them use off-the-shelf materials for processing, making the raw material cost very small in percentage of total cost. As widely seen in metalworking industries in the country, these enterprises are not much automated to maintain production flexibility required of a small market operation. They adjust production as skilled workers are employed in various parts of the production process. As a result, they generally attain a high level of value added. At the same time, they often use specialized machinery in some processes. In such a case, their ability to divert into other products will be limited.

Relatively speaking, large metalworking enterprises in Oman appear to have been engaging in product development based on the work process they undertake. They have a certain level of product development and design capability – albeit not advanced and partly introduced by foreign sources, enabling them to produce their own products. They mostly use commercially available materials, machine elements, and products (such as motors), while the use of custom-made parts is limited to those with license agreement with foreign companies. Also, general-purpose machine tools are used for relatively simple processing, and application-specific machinery is only used for specially-designed products. Theoretically, as these enterprises offer an increasingly diverse product mix or adopt a complex production line, they shall start to contract out some of processing work to subcontractors. This marks the beginning of horizontal diversification. In practice, however, internal processing and assembly are still common, partly because production lines are relatively simple, and metalworking enterprises capable of serving as outside

manufacturers have rarely emerged.

Such self-sufficiency in manufacturing final products is basically the same in smaller enterprises and micro enterprises, the major difference being the size of order they receive. Thus, they are not ready to offer part of metalworking process for subcontracting.

In addition to the fabricated metal products and machinery industry, there is a subsector specializing in metalworking-related engineering. This subsector is divided into relatively large enterprises (not classified as large-scale enterprises, but larger than enterprises in other segment) who perform machining and repairing services mainly for oil industries, such as PDO and ORC, on a contract basis; and small-scale enterprises and micro-enterprises which do automobile repair like machining and adjustment of automotive parts. Enterprises in this subsector also own a variety of general-purpose machine tools. The former is recognized by customers as having a relatively high level of workmanship and reliability. They have the ability to complete the entire process of work within the country, rarely contracting out to foreign manufacturers. Nevertheless, their major customers are oil and refinery industries, which do not require a high level of precision as required by machining and assembly work for automotive and electronics industries.

The following sections analyze the future outlook for the metalworking industry on the basis of the present import value/volume.

(1) Raw materials and base metals

In 1992, imports of iron and steel, such as pig iron, steel, hoop steel, bar steel, shape steel, and ingot amounted to RO.24.3 million (170,000 tons). This volume is far from justifying a local production. On the other hand, establishing a steel stock center possessing distribution and simple processing capabilities seems to be important for future growth of the metalworking industry. However, the same function has already existed in steel stock house in Dubai. According to the present demand size, it is difficult to put this up in Oman. In case the demand for this kind of service increases in the future, Oman has a comparative advantage.

(2) Secondary steel materials

Imports of steel materials such as pipes and wires, components such as springs and pipe fittings, and cast and forged items totaled RO. 54 million, or 117,000 tons in 1992. Of total, steel pipes and casings amounted to RO. 35 million, or 88,000 tons. However, their minimum production level to attain an economy of scale is far above the current

consumption level.

The second largest subsector is tanks and other heavy items, amounting to RO. 8.2 million or 13,600 tons. Import substitution in this area has made some progress, although some import is still found to have been dependent on the size of products.

(3) Boilers, engines, pumps and parts

The category recording the largest import is agricultural machinery and parts, totaling to RO. 59 million or 12,300 tons (not including some mowing machines which are recorded on a unit basis). The category covers 18 H.S. 5-digit and 6-digit industries. As mentioned in the discussion of steel materials, this is the area where establishment of a distribution and repair center can be contemplated.

The second largest segment are motors, engines, turbines, and pumps, amounting to RO. 23.5 million or 4,000 tons. It should be noted, however, that this category encompasses 34 H.S. 6-digit industries, and each component does not show particularly a large size.

Then, imports of fans and compressors, and their parts amount to RO. 17.9 million (tonnage data are not available, as some of them are recorded on a unit basis). Of total, air-conditioners and parts account for RO. 16.5 million or 90,000 units, and are considered to be one of a primary candidate for local production or assembly.

Finally, non-metal ore quarrying and processing machinery and parts amount to RO. 16 million. On a per volume basis however, they are not very significant (800 tons).

(4) Electronics and electrical components and parts

General electric parts, such as switches, plugs, and lamp holders, dominate the highest share of total imports of electronics and electrical components and parts, totaling 14.8 million tons or 3,800 tons. Local consumption of these parts is expected to increase further, so that these are considered as a prospective area of local production.

The second largest segment are broadcasting equipment, radio receivers, and television sets, amounting to 27.3 million tons. In particular, colored TVs, about 130,000 sets imported in 1992 – seem to sustain a level of local production, if exports to the GCCs are taken into account.

(5) Motor vehicles and parts

Imports of motor vehicles and parts in 1992 reached 331 million Rials, accounting for more than 40% of total metal machinery imports.

Motor vehicle imports consist of 46,400 passenger cars, 3,100 vehicles for commercial and industrial uses, and 2,700 vehicles for public transportation, with a

combined total of RO. 268 million. On the other hand, imports of automotive parts totaled RO. 56.3 million or 14,800 tons.

While the present level of demand is still too small to consider local production, the country seems to have reached a market size that makes CKD production feasible on a per unit basis, provided that demand is not diversified.

Local production of automotive parts seems to be feasible on a total volume basis, but the current level of variation in individual models among makers, together with the general lack of interchange ability, indicates an unfavorable prospect. One realistic approach is to consider a flexible system involving the production of a variety of product mix in a small lot, like standardized parts as in the case of battery and radiators. An assumption that they will also be supplied to the GCCs however has to be maintained.

Although the market size of some of the above mentioned products seems to have grown to a sustainable level of local production, the diversified demand and competition with imported products will make the local production unfeasible. For materialization of local production of these products, introduction of foreign capital having competent technology and marketing channel, which will help support the economic size of operation is essential.





Table 3-1 Change in Investment on Manufacturing Sector

Sector	Unit	1975	1976-80	1981-85	1986-90	1991	1992
31 Food	Investment						
Beverages & Tobacco	Accumulated Total	0.0	10,401.9	9,588.6	14,341.2	7,198.0	4,135.0
		0.0	10,401.9	19,990.5	34,331.7	41,529.7	45,664.7
32 Spinning, Weaving, Finishing Textiles & Leather	Investment	0.0	941.0	104.5	12,889.7	2,421.0	3,154.0
	Accumulated Total	0.0	941.0	1,045.5	13,935.2	16,356.2	19,510.2
33 Wood & Wood Products including Furniture	Investment	31.9	1,864.2	4,841.6	3,510.1	366.0	313.0
	Accumulated Total	31.9	1,896.1	6,737.7	10,247.8	10,613.8	10,926.8
34 Paper & Paper Products Printing & Publishing	Investment	44.3	1,539.4	2,396.8	4,251.3	0.0	1,387.0
	Accumulated Total	44.3	1,583.7	3,980.5	8,231.8	8,231.8	9,618.8
35 Chemicals & Chemical Products, Products of Petroleum & Coal	Investment	0.0	1,677.6	53,978.7	18,546.7	5,175.0	368.0
	Accumulated Total	0.0	1,677.6	55,656.3	74,203.0	79,378.0	79,746.0
36 Non-Metallic Mineral Products	Investment	368.7	11,761.8	97,857.1	21,189.7	3,244.0	2,711.0
	Accumulated Total	368.7	12,130.5	109,987.6	131,177.3	134,421.3	137,132.3
37 Basic Metal Industries	Investment	0.0	0.0	0.0	89,200.0	0.0	0.0
	Accumulated Total	0.0	0.0	0.0	89,200.0	89,200.0	89,200.0
38 Fabricated Metal Products	Investment	25.9	2,389.1	7,479.1	10,140.2	1,144.0	976.0
	Accumulated Total	25.9	2,415.0	9,894.1	20,034.3	21,178.3	22,154.3
39 Other Manufacturing Industries	Investment	0.0	0.0	0.0	398.8	12.0	30.0
	Accumulated Total	0.0	0.0	0.0	398.8	410.8	440.8
Total	Investment	470.8	30,575.0	176,246.4	174,467.7	19,560.0	13,074.0
	Accumulated Total	470.8	31,045.8	207,292.2	381,759.9	401,319.9	414,393.9

Source: Statistical Year Book

Table 3-2 Distribution of Establishments in Manufacturing Sector by Size of Investment (1/3)

Sector Code	Total	Investment Size				>=25,000 & <50,000	<25,000
		>=100,000	>=75,000 & <100,000	>=50,000 & <75,000	>=25,000 & <50,000		
3111 Meat	2	1	0	1	0	0	0
3112 Dairy products	10	7	1	0	2	0	0
3113 Fruit/vegetable processing/canning	1	1	0	0	0	0	0
3114 Fish processing/canning	13	10	3	0	0	0	0
3115 Oil & fats	2	1	0	0	0	1	0
3116 Grain mill products	24	1	0	0	0	23	0
3117 Grain mill products	91	4	6	13	9	59	0
3119 Cocoa chocolate & sugar	1	1	0	0	0	0	0
3121 Other food products	49	16	7	3	3	20	0
3122 Animal feeds	2	2	0	0	0	0	0
3134 Animal feeds	10	8	0	2	0	0	0
3100 Food & beverages	205	52	17	19	14	103	0
3212 Animal feeds	3	2	0	0	0	1	0
3221 Apparel	30	24	4	0	1	1	0
3240 Apparel	1	1	0	0	0	0	0
3200 Animal feeds	34	27	4	0	1	2	0
3311 Wood & Wooden products	584	8	5	8	13	550	0
3312 Saw/ wood mills	1	0	0	0	0	1	0
3319 Saw/ wood mills	1	0	0	0	0	1	0
3320 Saw/ wood mills	173	6	1	1	6	159	0
3300 Wood & Wooden products	759	14	6	9	19	711	0

Table 3-2 Distribution of Establishments in Manufacturing Sector by Size of Investment (2/3)

Sector Code	Total	Investment Size			>=25,000 & <50,000	<25,000
		>=100,000	>=75,000 & <100,000	>=50,000 & <75,000		
3412 Saw/ wood mills	5	3	1	0	1	0
3419 Saw/ wood mills	4	2	2	0	0	0
3420 Printing/ publishing	30	16	5	4	4	1
3400 Saw/ wood mills	39	21	8	4	5	1
3511 Printing/ publishing	9	7	2	0	0	0
3512 Printing/ publishing	3	2	0	0	0	1
3513 Syn. resins/ plastic materials	2	2	0	0	0	0
3521 Paints	4	4	0	0	0	0
3522 Drugs/ medicines	1	1	0	0	0	0
3523 Soaps, perfumes, cosmetics	9	5	0	2	1	1
3529 Other chemical products	3	2	1	0	0	0
3530 Petroleum refineries	1	1	0	0	0	0
3540 Other petroleum products	2	2	0	0	0	0
3551 Other petroleum products	3	3	0	0	0	0
3560 Plastic products	11	9	0	2	0	0
3500 Printing/ publishing	48	38	3	4	1	2
3620 Glass	18	5	2	4	4	3
3691 Structural clay	1	0	0	0	0	1
3692 Cement, lime & plaster	5	4	0	0	0	1
3699 Other non-metallic mineral products	1,118	80	17	26	41	954
3600 Non-metallic mineral products	1,142	89	19	30	45	959
3710 Iron & steel	2	0	0	0	1	1
3720 Non-ferrous metals	2	2	0	0	0	0
3700 Basic metal industries	4	2	0	0	1	1

Table 3-2 Distribution of Establishments in Manufacturing Sector by Size of Investment (3/3)

Sector Code	Total	Investment Size				>=25,000 & <50,000	<25,000
		>=100,000	>=75,000 & <100,000	>=50,000 & <75,000	>=25,000 & <50,000		
3811 Cutlery, hand tool/ hardware	3	0	0	0	0	0	3
3812 Metal furniture	20	2	0	0	0	0	18
3813 Structural metal products	157	13	6	9	7	7	122
3819 Fabricated metal products	350	10	7	10	16	16	307
3821 Fabricated metal products	1	1	0	0	0	0	0
3822 Agricultural machinery	1	0	0	0	1	1	0
3824 Special industrial machinery	2	1	0	0	1	1	0
3829 Special industrial machinery	3	2	1	0	0	0	0
3831 Electrical industrial machinery	3	2	0	1	0	0	0
3833 Electrical appliances	2	2	0	0	0	0	0
3839 Other electrical appliances	3	2	0	0	1	1	0
3841 Ship building/ repairing	3	0	0	0	2	2	1
3843 Motor vehicles	2	2	0	0	0	0	0
3844 Motorcycles & bicycles							
3800 Fabricated metal products	550	37	14	20	28	28	451
3901 Jewellery	8	1	0	1	1	1	5
3909 Other manufacturing	8	3	0	1	2	2	2
3900 Other manufacturing	16	4	0	2	3	3	7
4102 Gas mfr & distribution	2	2	0	0	0	0	0
Total	2,799	286	71	88	117	117	2,237

Source: MCI

**Table 3-3 Outline of Supply and Demand Situation by Sub-sector (1/2)**

(Unit: R.O.'000)										
	1992				1991				H.S. sections for import/export	ISIC sections for production
	Total import (A)	Re-export (B)	Import for domestic (A-B) consumption	Production for domestic (C-D) consumption	Total import (A)	Re-export (B)	Import for domestic (A-B) consumption			
	Production (C)	Export (D)	Production (C)		Export (D)	Production for domestic (C-D) consumption				
	Total supply (A+C)	Total export (B+D)	Total domestic consumption (A-B)+(C-D)		Total supply (A+C)	Total export (B+D)	Total domestic consumption (A-B)+(C-D)			
	Food, beverages & tobacco	278,500 39,554 318,054	34,613 35,468 70,081		243,887 4,086 247,973	227,600 32,443 260,043	17,394 31,806 49,200	210,206 637 210,843		
Spinning, weaving, finishing textiles & leather	67,300 50,063 117,363	2,084 18,165 20,249	65,216 31,898 97,114	64,500 42,112 106,612	4,480 10,835 15,315	60,020 31,277 91,297	8,11,12	32		
Wood & wood products including furniture	16,900 25,432 42,332	273 94 367	16,627 25,338 41,965	16,300 24,753 41,053	421 130 551	15,879 24,623 40,502	9	33		
Paper & paper products, printing & publishing	19,100 13,706 32,806	204 1,165 1,369	18,896 12,541 31,437	19,500 9,429 28,929	350 884 1,234	19,150 8,545 27,695	10	34		
Chemicals & chemical products, products of petroleum & coal	119,000 175,236 294,236	8,626 6,268 14,894	110,374 168,968 279,342	103,800 174,941 278,741	7,915 6,035 13,950	95,885 168,906 264,791	6.7	35		

Table 3-3 Outline of Supply and Demand Situation by Sub-sector (2/2)

	1992				1991				(Unit: R.O.'000)	
	Total import (A)	Re-export (B)	Import for domestic (A-B) consumption	Production for domestic (C-D) consumption	Total import (A)	Re-export (B)	Import for domestic (A-B) consumption	Production for domestic (C-D) consumption	H.S. sections for import/export	ISIC sections for production
	Production (C)	Export (D)	Total domestic consumption (A-B) consumption	Total domestic consumption (A-B) consumption	Production (C)	Export (D)	Total domestic consumption (A-B) consumption	Total domestic consumption (A-B) consumption		
	Total supply (A+C)	Total export (B+D)	Total domestic consumption (A-B) consumption	Total domestic consumption (A-B) consumption	Total supply (A+C)	Total export (B+D)	Total domestic consumption (A-B) consumption	Total domestic consumption (A-B) consumption		
Non-metallic mineral products	23,600	408	23,192		20,500	999	19,501		13	36
	113,326	1,384	111,942		111,492	244	111,248			
	136,926	1,792	135,134		131,992	1,243	130,749			
Basic metal industries	145,900	4,677	141,223		136,000	4,934	131,066		5,15	37
	8,795	29,300	-20,505		8,795	26,639	-17,844			
	154,695	33,977	120,718		144,795	31,573	113,222			
Fabricated metal products	664,200	195,288	468,912		541,100	123,476	417,624		16,17,18	38
	33,319	1,987	31,332		31,386	763	30,623			
	697,519	197,275	500,244		572,486	124,239	448,247			
Other manufacturing industries	114,700	7,289	107,411		99,100	5,128	93,972		14,19,20,21	39
	890	2,881	-1,992		800	1,730	-931			
	115,590	10,170	105,420		99,900	6,858	93,042			
	1,449,200	253,462	1,195,738		1,228,400	165,097	1,063,303			
	460,320	96,712	363,608		436,150	79,066	357,084			
Total	1,909,520	350,174	1,559,346		1,664,550	244,163	1,420,387			

Source: Compiled from "Statistical Year Book 1992, 1991"

Note: Excluding oil sector

### **Explanatory Notes for Table 3-3:**

1. Production (C): The data on industrial production by subsector is not available, and the data available about production is that of annual production of the companies on the year when they registered. The total compounded figure from this annual production up to the year in question was used as a substitute for the yearly production data.
2. Total supply (A+C) may include double counting of import value (A) which is fed to local production.
3. Re-export value (E) is included in import value (A), but not included in export value (D) (export value (D) is that of locally manufactured goods only).

Table 3-4 Recorded Imports by Producing Industry &amp; End Use

Years	Total	(R.O. '000)				
		Primary & Processed Food & Beverages	Primary & Processed Industrial Supplies	Fuels & Lubricants	Machinery & Other Capital Equipment, Parts & Accessories	Transport Equipment & Parts & Accessories
Agriculture,						
1990	79,821	66,977	12,651	73	97	0
1991	77,018	66,157	10,649	98	86	0
1992	79,983	68,652	11,198	94	2	0
Mining &						
1990	4,222	0	4,214	8	0	0
1991	5,477	0	5,431	46	0	0
1992	8,521	0	8,514	7	0	0
Manufacturing						
1990	880,134	97,778	220,573	40,628	173,266	192,021
1991	1,108,215	109,903	266,680	20,745	257,462	253,887
1992	1,315,694	120,613	286,802	25,783	256,459	374,444
(%) of total in 1992		(9.2%)	(21.8%)	(2.0%)	(19.5%)	(28.5%)
Community,						
1990	120	0	73	0	0	0
1991	123	0	91	0	0	0
1992	109	0	60	0	0	0
Total Imports						
1990	964,297	164,755	237,511	40,709	173,363	192,021
1991	1,190,833	176,060	282,851	20,889	257,548	253,887
1992	1,404,307	189,265	306,574	25,884	256,461	374,444
(excludes unclassified)						
1990						
1991						
1992						

Source: Statistical Year Book 1992