

INDIAN PETROLEUM & NATURAL GAS STATISTICS

1989-90

ECONOMICS & STATISTICS DIVISION
MINISTRY OF PETROLEUM & CHEMICALS
DEPARTMENT OF PETROLEUM & NATURAL GAS
GOVERNMENT OF INDIA
NEW DELHI

INDIAN
PETROLEUM & NATURAL
GAS STATISTICS

1989-90

ECONOMICS & STATISTICS DIVISION
MINISTRY OF PETROLEUM & CHEMICALS
DEPARTMENT OF PETROLEUM & NATURAL GAS
GOVERNMENT OF INDIA
NEW DELHI

P R E F A C E

The present publication is the twenty-fourth of the annual series brought out by the Economics & Statistics Division which presents detailed petroleum and natural gas statistics relating to India and relevant International statistics. This publication, in line with our previous annual publications, tries to provide various key national petroleum and natural gas statistics both on financial as well as on calender year basis, the former to meet the requirements of national planning and administration and the later to meet various obligations to U.N. and other international bodies and for purposes of maintaining historical continuity.

2. While we have taken all possible care to ensure accuracy in presentation of data in various tables, we would welcome suggestion from readers for rectification of any error or omission noticed by them.

3. We express our thanks to Oil Industry Development Board for meeting the cost of printing of this publication.

V. ASOKAN

December, 1990.

Deputy Adviser

ECONOMICS & STATISTICS DIVISION

V. Asokan, Deputy Adviser

A. N. Tuteja, Deputy Director (Cost)

D.C. Garg, Senior Investigator

DR. P.G.S. Rao, Senior Investigator

Basant Kumar, Junior Investigator

M.J. Kutty, Personal Assistant

Miss Kanwaljeet Kaur, Senior Computer

Mrs. Savita Bhutan, L.D.C.

Bodan Lal, Daftry

CONTENTS

S.NO.	SUBJECT	PAGE NO.
1.	Scope & Coverage	(i)-(ii)
2.	Selected Economic Indicators of the Indian Economy	(iii)-(iv)

PART - I

PETROLEUM STATISTICS

I.	Highlights of Indian Petroleum Industry During the year 1989-90.	1-2.
II.	Important Events in The History of Indian Petroleum Industry in India During 1989-90.	3-13
III.	India's Petroleum Industry progress At-A-Glance (1947-48 to 1989-90)	14
IV.	Commodity Balance of crude Petroleum and Petroleum Products	15
V.	Growth of Petroleum Industry In India (Calendar/Financial Years)	16-17
VI.	Petroleum Energy In India: 1982 to 1989 & 1982-83 to 1989-90.	18-19
VI.	EXPLORATION :	
1.	Area-wise Deployment of deep drilling rigs, Well & Metreage drilled by ONGC & OIL from 1970-71 to 1989-90.	20
2.	Exploratory and development drilling done by ONGC & OIL since 1970-71.	21
3.	Status of Wells as on 1st April of each year.	22
4.	State-wise achievements of geological field parties since inception upto March 1990.	23
5.	State-wise achievements of geophysical field parties since inception upto March 1990.	24
6.	State-wise achievements of drilling since inception upto March 1990.	25
VII.	CRUDE OIL :	
1.	Reserves of Crude Oil.	26
2.	Company-wise production of crude oil on calendar year basis.	27
3.	Company-wise production of crude oil on financial year basis.	28
4.	Company-wise production of crude oil in India on calendar /financial year basis.	29

VIII. NATURAL GAS :

1.	Reserves of Natural Gas.	30
2.	State-wise gross production of natural gas in India on calendar/financial year basis.	31
3.	State-wise gross and net production of natural gas since 1970-71.	32-33
4.	State-wise utilisation of natural gas in India on financial year basis.	34
5.	Industry-wise off takes of natural gas in India.	35

IX. REFINING :

1.	Petroleum Refining Capacity as on 1.4.1990.	36
2.	Refinery Crude Throughout and production of Petroleum Products on calendar/financial years.	37-38
3.	Refinery-wise crude run and total production (net) of petroleum products (1965-66 to 1989-90).	39-40
4.	Trends in domestic production of petroleum products during the period 1975-76 to 1989-90.	41
5.	Refinery production and pattern of refinery production in India on Calendar/financial year.	42-43

X. CONSUMPTION/SALES :

1.	Total consumption of petroleum products from 1948/1948-49 to 1989/1989-90.	44
2.	Trends in sales/consumption of petroleum products during the period 1970-71 to 1989-90.	45
3.	Product-wise sales/consumption of petroleum products during the years 1985-1989 (calendar years) and 1985-86 to 1989-90 (financial years).	46-47
4.	Seasonal indices of the sales/consumption of major Petroleum Products in India.	48
5.	Sales/consumption of Petroleum Products and market participation of oil companies in India from 1960-61 to 1989-90.	49
6.	Deliveries made to international/coastal bunkers during the years 1975-76 to 1989-90.	50
7.	Estimated State-wise Consumption of Petroleum Products 1989-90.	51
8.	Estimated State-wise per capita sales/ consumption of petroleum Products.	52
9.	Estimated per capita consumption of selected petroleum products.	52
10.	Estimated sector-wise (end-use) industry consumption of selected petroleum products 1985-86 to 1989-90.	53-55

11.	Consumption of diesel oil in Indian Railways from 1960-61 to 1989-90.	56
12.	Industry/Plant-wise Offtakes of Naphtha 1982-83 to 1989-90.	57
13.	Plant/customer-wise Offtakes of LSHS/HHS from 1980-81 to 1989-90.	58
14.	State-wise fuel consumption and power generated in gas turbine and diesel power stations in India 1986-87.	59
15.	State-wise consumption of fossil fuels for electricity generation from thermal power stations in India - 1986-87	60
IX.	FOREIGN TRADE :	
1.	Imports/Exports of crude oil and petroleum products from 1970-1989.	61
2.	Imports/Exports of crude oil and petroleum products from 1970-71 to 1989-90.	62
3.	Imports/Exports of crude oil and petroleum products during 1985 to 1989 (Product-wise).	63
4.	Imports/Exports of crude oil and petroleum products during 1985-86 to 1989-90 (Product-wise).	64
5.	Trend in India's overall trade balance and trade balance with OPEC countries.	65
6.	India's foreign exchange reserves - 1970-71 to 1989-90.	66
7.	India's POL imports as a proportion to over all exports from the country - 1970-71 to 1989-90.	66
XII.	MANPOWER EMPLOYED :	
1.	Manpower employed in the Petroleum Industry in India 1970-1990.	67
2.	Category-wise total manpower employed in the petroleum industry in India 1970-1990.	67
3.	Category-wise manpower employed in various sectors of Petroleum Industry in India 1970-1990.	68
XIII.	PRICES :	
1.	Index number of Wholesale Prices of Petroleum Products and other energy items in India	69
2.	Prices of indigenous onshore and offshore crude oil in India.	70
3.	Development of basic ceiling selling prices of POL products ex-storage (Bombay) since 17.8.79.	71

4.	Price build-up of selected petroleum products in major cities as on 1.4.1990	72-74
5.	Trend in retail selling prices of petroleum products in Metropolitan Towns in India since 1971.	75-76
6.	Rates of dealers commission for MS, HSDO and LPG in India.	77
XIV.	EXCISE/CUSTOM DUTIES AND SALES TAX :	
1.	Realisation of excise and custom duties from crude oil and petroleum products (1970-71) to (1990-91) (BE).	78
2.	Percentage share of Central excise on POL to total Central excise and to net National products.	79
3.	Composite incidence of excise/custom duties on petroleum products.	80
4.	Royalty and oil development cess paid by oil companies on production of crude oil and natural gas since 1970-71 onwards.	81
5.	Excise Duty Element included in Selling Prices of Bulk Refined Petroleum Products.	82
6.	Excise & Custom duties in the basic ceiling selling prices (BCSP) ex-storage point effective from 20.3.1990	83
7.	Sales Tax rates applicable on crude oil, Natural Gas and Petroleum Products in different States as on 1.4.1990.	84-88
8.	Sales Tax payments (including of MST & CST) on crude oil, natural gas and petroleum products made by the oil companies to States/Union Territory Governments during the years 1979-80 to 1989-90.	89
XV.	TRANSPORTATION :	
1.	Tonnage of Indian Tanker Fleet - 1975 to 1990.	90
2.	Indian Tanker fleet as on 1.4.1990.	91-97
3.	Share of traffic in Petroleum products in the total traffic handled at major ports.	98-99
4.	Movement of POL Traffic on Railways since 1970-71.	100
5.	Rail freight rates in respect of Petroleum products (dangerous & non-dangerous)	101
6.	Crude oil and product pipelines in India as on 1.4.1990.	102-104

XVI. MARKETING NET WORK :

1. Retail outlets in India as on 1st January of each year - 1968 to 1990. 105
2. State-wise distribution of retail outlets, multi-purpose/farm fuel centres, LDO/SKO dealers and LPG distributors as on 1.4.1990. 106
3. State-wise number of LPG Domestic consumers as on 1.4.1990. 107

XVII. ENERGY :

1. Gross production of Energy by various sources in India. 108
2. Sectoral Share in Commercial Energy Consumption 1960-61 to 1984-85. 109
3. Estimates of Commercial and non-commercial Energy Requirement in 1999-2000 109

XVIII. GENERAL :

1. Gross Domestic Product of crude petroleum and natural gas, coal & lignite at current prices. 110

XIX. INTERNATIONAL PETROLEUM STATISTICS :

1. World Proved Reserves of crude oil & natural gas at end of 1989. 111
2. World estimated crude oil production 1981-89. 112-113
3. Crude oil production by OPEC member countries 1973-89. 113
4. World production of Natural Gas - 1981 to 1989 114
5. World Consumption of Natural Gas - 1981 to 1989 115
6. Productivity of producing wells in OPEC Member Countries - 1986 116
7. World oil refining capacities at end 1981 & 1989. 117
8. World Refinery Crude Throghout-1976 to 1989. 118
9. Country-wise World oil consumption 1981-1989. 119
10. Product-wise Consumption of Main Petroleum Products in the Non-Communist World (NCW) During 1981 to 1989. 120
11. World oil production, consumption and relative deficit/surplus in each region/country during 1989 & 73. 121
12. World crude oil & Petroleum Products imports and exports 1989. 122
13. Exports of crude oil & Refined Products by OPEC member countries - 1970-1988. 123
14. Crude oil Imports from OPEC Member Countries by regions 1970 - 1987. 124
15. Country-wise OPEC crude oil exports by regions 1986. 125

16.	Oil revenue of OPEC members countries 1974-1988.	126
17.	Value of Petroleum Exports from OPEC Member Countries - 1970-88	126
18.	Official Development assistance from OECD and OPEC members 1983,1985,1987,1988.	127
19.	Loan assistance from OPEC and other oil supplying nations 1980-81 to 1989-90.	128
20.	Official selling prices of key OPEC crudes since 1974.	129-133
21.	Development of Crude Petroleum Price (FOB)	134
22.	Petroleum Products Price Developments.	135
23.	Natural Gas prices in Industrial/Developing Countries of the World - 1982/1989	136
24	CIF prices of crude petroleum and petroleum products - 1987 to 1990	137-146
25.	Short term trend in weighted average official selling prices of OPEC crude vs their spot assessment since June 1980 to March 1990.	147-154
26.	Development of crude petroleum prices 1989-90.	155
27.	Development of spot prices of key OPEC crude oils since January 1986.	156
28.	Development of spot prices of major petroleum products in key Trading centres of the world during - 1988-89.	157
29.	Development of lowest posted price of POL products of Bander Mahshar/Quoin Island.	158
30.	World survey of selected petroleum products prices (including Taxes) 1989.	159
31.	Consumer/retail prices of bulk petroleum products in different countries of the world (Jan. - Oct.,1988).	160 (R)
32.	Posted airfield prices of Jet A-I Fuel at major international airports as on 1st April of each year	161
33.	Wholesale prices of OPEC representative crudes in current and constant (1980) dollars.	162
34.	Wholesale prices of OPEC representative crudes in terms of SDR's.	163
35.	World tanker fleet by flag 1981 to 1986.	164
36.	World tanker fleet by size and tonnage scrapped 1981 to 1986.	164
37.	Inter-area of Total Oil Movements - 1989.	165
38.	World primary energy consumption by fuel -1989.	166
39.	Estimated per capita primary energy consumption Some international comparison - 1988.	167
40.	Estimated per capita consumption of main petroleum products - Some international comparisons - 1989.	168
41.	Trends in world primary energy consumption-1989.	168
42.	Primary energy consumption in selected countries areas of the World- 1975, 1980, 1985, 1988 & 1989	169
43.	Commercial Primary energy production and consumption by country groups 1970-1990-1995	170
44.	Economic indicators of OPEC nations during 1988.	171

PART - II

PLAN STATISTICS

1. SEVENTH PLAN :

1. Seventh Plan Outlays (1985-90) and actual expenditure for 1985-86 1986-87 1987-88 1988-89 & (R.E.) for 1989-90 for Ministry of Petroleum & Natural Gas. 172
2. Domestic Crude Production Profile & actual during Seventh Plan 1985-90. 173
3. Domestic Gas Production Profile & actual during Seventh Plan 1985-90. 173
4. Targets for Exploration Activity in Seventh Plan. 174
5. Seventh Plan targets for Oil Sector-(1985-90) 174
6. Demand for Petroleum Products 1984-85 to 1999-2000. 175
7. Import Availability Ratios of Crude oil & POL Products 1979-80 to 1989-90. 175
8. Estimated Value of Crude Oil & POL Products Imports by the end of Seventh Plan period. 175

PART - III

FINANCIAL PERFORMANCE/ STRUCTURE

1. Financial Review/structure of the Pubilc/Joint Sector Undertakings Under the Purview of Ministry of Petroleum and Natural Gas during 1989-89 and quick Review for 1989-90. 176-191
2. Consolidated financial structure-1989-90. 192
3. Consolidated financial structure-1988-89. (All undertakings and categories) 193
4. Consolidated financial structure-1987-88 (All undertakings and categories). 194
5. Consolidated financial structure-1986-87 All undertakings and categories) 195
6. Consolidated financial structure-1986-87 to 1988-89. (Exploration & Production). 196
7. Financial structure - Oil & Natural Gas Commission - 1986-87 to 1988-89. 197
8. Financial structure - ONGC Videsh Ltd. 1986-87 to 1988-89 198
9. Financial structure - Oil India Limited 1986-87 to 1988-89 199
10. Financial structure Gas Authority of India Ltd. 1986-87 to 1988-89 200
11. Consolidated Financial structure 1986-87 to 1988-89 (Refining & Marketing). 201
12. Financial structure-Indian Oil Corporation Ltd. 1986-87 to 1988-89. 202
13. Financial structure-Bharat Petroleum Corpn. Ltd. 1986-87 TO 1988-89. 203

14.	Financial structure-Hindustan Petroleum Corpn. Ltd.1986-87 to 1988-89.	204
15.	Financial structure-Cochin Refineries Ltd. 1986-87 to 1988-89.	205
16.	Financial structure-Madras Refineries Ltd. 1986-87 to 1988-89.	206
17.	Financial structure-IBP Co.Ltd. 1986-87 to 1988-89.	207
18.	Financial structure-Lubrizol India Ltd. 1986-87 to 1988-89.	208
19.	Financial structure-Indian Oil Blending Ltd. 1986-87 to 1988-89.	209
20.	Financial structure-Bongaigaon Refinery & Petrochemicals Ltd. 1986-87 to 1988-89.	210
21.	Consolidated Financial structure of Engg. Services & Other Units.1986-87 to 1988-89.	211
22.	Financial structure-Engineers India Ltd. 1986-87 to 1988-89.	212
23.	Financial structure-Balmer Lawrie Co.Ltd. 1986-87 to 1988-89.	213
24.	Financial structure-Biecco Lawrie Co.Ltd. 1986-87 to 1988-89.	214
25.	Capital investment in public/joint sector undertakings as on 1st April of 1988,1989 and 1990.	215
26.	Glossary of terms used for tables on Financial Statistics.	216
	APPENDIX	I to XV

SCOPE AND COVERAGE OF DATA PUBLISHED

1. Scope: The Indian Petroleum & Natural Gas Statistics presents comprehensive statistics on various aspects of Indian Petroleum and Natural Gas industries. The relevant data on international developments in respect of the said industries has also been presented in the publication.

2. Coverage: The statistics presented in the publication covers the exploration, production, refining, marketing, etc. activities of petroleum and natural gas industries.

3. Source: The primary statistics in respect of petroleum and natural gas industries included in the publication is based on various returns submitted by the oil companies in the country to the Ministry of Petroleum & Chemicals on voluntary basis under the directives issued by the Ministry to the said companies from time to time.

The Sources of all the secondary data, including international statistics, incorporated in the publication, have been indicated at the bottom of tables showing such statistics.

4. Limitations: The data in respect of sales/consumption of petroleum products reflect despatches of various petroleum products from the sales depots of different oil companies to the bulk consumers/retail outlets. The State-wise sales / consumption of such products show despatches to direct consumers/retail outlets meant for consumption/sales in a particular State.

5. Reference Period: All the key statistics for the domestic petroleum and natural gas industries have been presented on calender (January-December) as well as on financial year (April-March) basis.

6. Natural Gas: The gross production of natural gas reflects gross withdrawals of natural gas from reservoir. On the other hand, the net production of natural gas shows gross withdrawal of natural gas from reservoirs less gas used for reinjection into reservoirs for pressuring and gas which is flared and/or vented.

The utilisation data for natural gas includes gas marketed, gas used for LPG extraction and gas consumed for field operations by the companies engaged in hydrocarbons exploration/production activities.

7. Petroleum Exports: The data relating to export of crude oil includes Indian Crude oil (Bombay High) consigned for processing abroad. The refined petroleum products supplied by the Indian oil companies to Nepal have also been included under Indian exports from 1983-84 onward. Prior to 1983-84, the supplies of products to Nepal have not been included under exports.

8. Petroleum Imports: The crude oil and product import figures given in the publication include crude oil/POL products imported by the Indian oil companies on behalf of Nepal for processing of crude oil in Indian refineries and arranging supplies of desired products to Nepal. Petroleum products actually brought into the country from processing of Indian or International crudes at foreign refineries for Indian oil companies, have also been included under the product import figures.

9. Value of Import/Export: The value data in respect of exports of petroleum included in the publication shows F.O.B. value of exports whereas similar value figures for imports reflect C.I.F. value of imports.

10 Revision/Updating: Necessary revision/updating in the past data have been made in the light of latest available figures.

11. Abbreviations: Details of abbreviations used have been provided in Appendix.

12. Conversion Factors: The conversion factors generally used in the Oil Sector are also given in the Appendix.

Selected Economic Indicators of the Indian Economy.

Indicator	Unit/ Base	1980-81	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90*
1.	2.	3.	4.	5.	6.	7.	8.	9.
1.Geographical Area	M.Sq.km.	3.29	3.29	3.29	3.29	3.29	3.29	3.29
2.Population	Million	690.1	750.9	766.1	781.4	796.6	811.8	N.A.
3.Gross National Product at factor cost								
i)At current prices	Rs.Crores	122571	206445	232730	258637	291789	346277	N.A.
ii)At 1980-81 prices	"	122571	148789	156147	162188	168378	186143	N.A.
4.Net National Product at factor cost:								
i)At current prices	Rs.Crores	110484	184354	206491	228708	257913	306822	N.A.
ii)At 1980-81 prices	"	110484	133341	139805	144828	149967	166593	N.A.
5.Per capita Net National Product:								
i)At current prices	Rupees	1627.2	2494.6	2735.0	2970.2	3285.5	3835.3	N.A.
ii)At 1980-81 prices	"	1627.2	1804.3	1851.7	1880.9	1910.4	2082.4	N.A.
6.Foreign Exchange Reserves:								
i)Gold	Rs.Crores	225.6	254.8	274.3	274.3	274.3	274.3	274.3
ii)SDR	Mn.of IDRS	490.5	146.5	115.1	139.4	69.7	79.5	81.9
iii)Foreign Exchange	Rs.Crores	4822.1	6816.8	7384.4	7645.2	7287.1	6604.6	5787.2
7.Foreign Trade:								
i)Import	Rs.Crores	12549	17134	19658	20096	22399	28194	35412
ii)Export	"	6711	11744	10895	12452	15741	20302	27681
iii)Balance of Trade	"	-5838	-5390	-8763	-7644	-6658	-7892	-7731
8.Index of Production:								
i) Agricultural	@	135.3	154.6	158.4	152.5	151.3	182.7	N.A.
ii)Industrial	1980-81=100	100.0	130.7	142.1	155.1	166.4	180.9	195.9
9.Wholesale Price Index:	81-82=100		120.1	125.4	132.7	143.6	154.2	165.7
10.Consumer Price Index:								
i)Industrial Workers	1960=100	401	582	620	674	736	803	855
ii)Agricultural Labourers	1960-61=100	395	537	546	572	629	N.A.	N.A.
iii)Urban Non-manual Workers	1960=100	369	532	568	613	668	136$$	N.A.
11.Employment:								
i)Organised Sector:								
a) Public Sector	Million	15.48	17.27	17.68	18.03	18.32	18.56**	N.A.
b) Private Sector	,,	7.40	7.31	7.37	7.37	7.39	7.47**	N.A.
TOTAL:	,,	22.88	24.58	25.05	25.40	25.71	26.03**	N.A.
ii)No. of persons on life register of employment exchange @@	Million	16.20	23.92	27.03	30.48	29.57	30.30	33.25
12.Energy Generation (Gross)								
Coal	Mn. Tonnes	113.91	147.41	154.20	165.77	179.75	194.57	200.85
Lignite	,,	5.11	7.80	8.05	9.43	11.16	12.40	11.23
Natural Gas	(Mn.Cubic Metres)	2358	7241	8134	9853	11467	13217	16989
Crude Oil	Mn.Tonnes	10.5	29.0	30.2	30.5	30.4	32.0	34.08
Petroleum Products	,,	25.35	35.16	41.16	45.37	47.28	49.51	53.50
13.Electricity:								
I)Utilities:	B.kwh.							
Hydel		46.5	53.9	51.0	53.9	47.4	57.8	62.0
Thermal	,,	61.3	98.8	114.4	128.9	149.5	157.5	176.6
Nuclear	,,	3.0	4.1	5.0	5.0	5.0	5.8	6.4
TOTAL	,,	110.8	156.9	170.4	187.8	201.9	221.1	245.0
ii)Non-Utilities:	,,	8.4	12.3	13.0	14.3	15.3	16.3	17.4
GRAND TOTAL:	,,	119.3	169.2	183.4	202.1	217.2	237.4	262.4

SOURCE: (1) RGI 's Ist March estimates. (2) Economic Survey 1989-90
N.A. = Not Available. ($$) = Based on new series of CPI, with base 1984-85
@ = Triennium ending 1969-70=100
@@ = As at end of March. * = Provisional

Selected Economic Indicators of the Indian Economy.

Indicator	Unit/ Base	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90(P)
1.	2.	3.	4.	5.	6.	7.	8.
1.Reserves@ (Balance recoverable)							
i)Crude Oil	Mn.Tonnes	469	558	581	638	726	757
ii)Natural Gas	Billion Cub Matres	411	497	541	579	648	686
2.Consumption:							
i)Crude Oil (in terms in refinery crude throughput)	Mn.Tonnes	25.84	42.91	45.7	47.75	48.8	51.94
ii)Peroleum Products (excl. RBF)	,,	30.90	40.87	43.66	46.42.	50.09	54.10
3.Production:							
i)Crude Oil	,,	10.51	30.17	30.48	30.36	32.04	34.09
ii)Pol Products	,,	24.12	39.88	42.76	44.73	45.70	48.69
4.Imports & Exports:							
(a)Gross Imports	Mn.Tonnes						
i)Qty.:Crude Oil	,,	16.25	15.15	15.48	17.93	17.81	19.49
POL Products	,,	7.29	3.86	3.04	3.95	6.26	6.54
TOTAL - (i)	,,	23.54	19.01	18.52	21.88	24.07	26.03
ii)Value: Crude Oil	Rs/Crores	3349	3687	2120	3036	2863	4090
POL Products	,,	1917	1274	653	979	1516	2228
TOTAL- (ii)	,,	5266	4961	2773	4015	4379	6318
(b)Exports:							
i)Qty.:Crude Oil	Mn.Tonnes	--	0.53	--	--	--	--
POL Products	,,	0.04	1.96	2.49	3.41	2.3	2.59
TOTAL- (i)	,,	0.04	2.49	2.49	3.41	2.3	2.59
ii)Value :Crude Oil	Rs/Crores	--	135	--	--	--	--
POl Products	,,	8	510	411	649	524	696
TOTAL-(ii)	,,	8	645	411	649	524	696
(c)Net Imports:							
i)Qty.:Crude Oil	Mn.Tonnes	16.25	14.62	15.48	17.93	17.81	19.49
POl Products	,,	7.25	1.90	0.55	0.54	3.96	3.95
TOTAL-(i)	,,	23.50	16.52	16.03	18.47	21.77	23.44
ii)Value.:Crude Oil	Rs/Crores	3349	3552	2120	3036	2863	4090
POL Products	,,	1909	764	242	330	992	1532
TOTAL-(ii)	,,	5258	4316	2362	3366	3855	5622
(d)Unit value of crude oil imports (Gross)	Rs/MT	2061	2435	1370	1693	1608	2099
5.India's Total Exports	Rs/Crores	6711	10895	12452	15741	20302	27681
6.POL Imports as percentage of India's total exports							
i)Gross Imports	%	78.5	45.5	22.1	25.5	21.6	23.0
ii)Net Imports	%	78.3	39.6	19.0	21.4	19.0	20.5
7.Contribution of Oil Sector to Centre/State Resources							
i)Royalty from Crude Oil	Rs/Crores	41	379	1091	570	602	628
ii)Royalty from Gas	,,	3	22	46	78	101	121
iii)Oil Developement Cess	,,	60	866	989	1513	2014	2920
iv)Excise & Coustom duties	,,	1512	2886	3165	4419	4879	5453
v)Sales Tax	,,	628	1564	1888	1871	2107	N.A.
vi)Generation of internal resources	,,	359	2358	2792	2199	3126	N.A.
vii)Corporate Tax	,,	76	740	792	797	763	N.A.
8.Natural Gas:							
i)Gross Production	Mn.Cu.Metres	2358	8134	9853	11467	13217	16989
ii)Utilisation	,,	1522	4950	7072	7968	9250	11172

N.A.=Not Available. (P)=Provisional. @=As on Ist January of First Year.

PART–I
PETROLEUM STATISTICS

PART–I
PETROLEUM STATISTICS

HIGHLIGHTS OF INDIAN PETROLEUM INDUSTRY DURING THE YEAR 1989-90

1. During 1989-90, ONGC carried out exploration and production activities in a large way by commissioning 8 new rigs, more than 51 new structures for drilling and 8 early production systems.

2. Drilling operations was extended by ONGC to 30 onland structures [6 in Krishna-Godawari, 6 in Cauvery, 3 in Assam (ER), 8 in Gujarat (WR), 2 in Tripura, 1 in Rajasthan (WR), 1 in Mizoram, and 3 in West Bengal (CR)] and 21 new offshore structures (19 in Bombay offshore and 2 in K.G.Offshore).

The onshore exploration operation of ONGC led to the discovery of Oil in some areas like Cauvery and Cambay basin, Assam and in Krishna - Godawari basin.

In the Offshore areas, oil was struck in B-19 structures of Bombay offshore and Gas was discovered in two structures of Bombay Offshore and in GK-29A structure in Kutch offshore.

ONGC also achieved success in commissioning a 18" oil line between Valcod-Akhodol; a 300 MM oil Pipeline from Lanwa to Balol, a 300 MM feeder line from GGS-2 to GGS-7 of Balol-Lanwa main line. It also succeeded in commissioning a 12" gas pipeline from Dahka to Dhuvaran, resulting in an increase in gas supply at the rate of 2 lakh M /day from Gandhar field in WRBC.

The overall production of Crude Oil in 1989-90 was 34.09 million tonnes. The Import of Crude Oil increased from 17.81 million tonnes in 1988-89 to 19.49 million tonnes in 1989-90 and the index of self reliance on oil has shown a marginal decrease from 60% in 1988-89 to 59% in 1989-90.

Refinery activities had been increased during 1989-90. The commissioning of Rs.6 crore Pilot Plant Project by BPCL at the refinery for converting Natural Gas into Middle Distillates, installation of a modern Bunkering at Nava Sheva Port; Commissioning of Captive Power Plant by HPCL, Bombay, commissioning of Gas liquid Chromatography Apparatus and TEL Blending Plant for Motor spirit by IOC(AOD); commissioning of Desalter in AVV-I in Barauni Refinery, completion of 125,000 KL additional HSD tank in Gujarat Refinery, commencing of Production of ATF in Guwahati Refinery, starting of marketing of Propylene by MRL, commissioning of Chaksu pump station and Main line engine No. II at Chaksu of SMPL and successful trail run of drag reduces in KAPL by IOC are some of the highlights of refinery activities.

The marketing activities have also been expanded. The commissioning of four LPG Bottling Plants at four places with a capacity of 5000 tonnes each per year by HPCL, commissioning of LPG Bottling Plant at Sholapur with a capacity of 22000 TPA, commissioning of LPG Bottling Plant of 800 MT Per Annum at Hardwar (U.P), setting up of Aviation Fuel Stations at Kandla (Gujarat), Nal (Rajasthan), Avantipur and Udhampur (J&K), Ludhiana (Punjab) and Port-Blair, starting of diagnostic computerised equipment for heavy vehicles for the first time in the country at Bombay, completion of Hydrant Refuelling system Phase-III at Sahar International Airport (Bombay), consumer facilities for Indian Embassy at Kathmandu (Nepal), construction of new Aviation Fuel Station at Port-Blair by the IOC and exporting 3128 tonnes of Benzene, (earning approx. $ 1 million) by the BPCL are some important events on the markeitng side.

The Oil Companies opened 306 new retail outlets, 120 new SKO/LDO dealerships and 228 new LPG dealerships during the year 1989-90.

About 12.30 lakhs new LPG consumers were enrolled during the year. With this the number of LPG domestic consumers increased to over 162.34 lakhs at the end of the year 1989-90.

CHRONOLOGY OF IMPORTANT EVENTS IN THE HISTORY OF PETROLEUM INDUSTRY IN INDIA FOR 1989-90

A. EXPLORATION AND PRODUCTION

1. Oil India Limited, Duliajan, Assam

1989 An 'Ultra High Frequency' (UHF) telecommunication system was commissioned in 1989 along OIL's very sophisticated crude oil pipeline to modernise the earlier VHF communication system installed 26 years back. This is one of India's first UHF Systems installed at a cost of around Rs.17 crores. Further, a Multi Access Radio Telephone (MART) system was introduced in 1989 in OIL's operational areas in Assam and Arunachal Pradesh for efficient management of operations in far flung and remote areas.

In 1989, OIL got Indira Gandhi Memorial National Award for Public Sector in the category 'Excellent Organisation'.

A sophisticated R&D Centre equipped with state-of the-art technology was set up in Duliajan in 1989 at a cost of Rs.8.5 crores. Innovative R & D projects such as the clarification and reinjection of produced formation water for pressure maintenance of oil reservoirs has optimised crude oil recovery from these reservoirs.

OIL got National Safety Awards (Mines) from the Directorate of Mines Safety in 1987, 1988 and 1989.

1990 OIL is finalising plans for establishing a 'National Oil Museum' in Guwahati at an estimated cost of Rs. 5 crores. This prestigious project will be the only one of its kind in India and will prove an asset to Assam where oil was first discovered more than a century ago.

2. Oil & Natural Gas Commission, Dehradun, U.P.

1989 In April, new structures were taken up for drilling at four places, three in Bombay offshore and one at south Badarpur in Cachar (ER). New ONGC owned cardwell rig commissioned in Ankleshwar. Oil was struck at B-19 structure in Bombay offshore.

In May, seven new structures taken up for drilling in various parts of the country. ONGC owned BHEL rig commissioned in Krishna Godavari. Gas was struck in B-119 structure in Bombay offshore.

In June, Cardwell, new ONGC owned rig, commissioned in Cambay. Early production system (EPS) on D-18 structure in Bombay off-shore commenced. Isolated pool wadu in Ahmedabad put on production.

In July, Oil struck at Khoraghot structure in Assam. A 12" gas pipeline from Dabka to Dhuvaran Commissioned resulting increase in Gas supply 2 lakh M /day from Gandhar field in WRBC. First GGS in Cauvery Basin commissioned at Narimanan structure.

In August, one cardwell rig started in Ahmedabad. Oil struck at two places i.e. at Anadala structure and in Cauvery Basin. Gas Compressor plant at Nawagam in Ahmedabad Project Commissioned increasing utilisation of low pressure gas. Well Nada-2 put on production within five days after completion of drilling resulting in an increase of 175 TPD oil production.

In September, the new find Anatata in WRBC and Elao Isolated gas pool in Ankleshwar, New platform put on production. Production of oil and gas started from the fractured basement rocks of Bombay High field.

In October, new structures taken up in east palan in Mehsana (WR), Mangudi in Cauvery and Elamanchili in Krishna Godavari (SR), B-138 in Bombay offshore. New ONGC owned cardwell rig commissioned in Ankleshwar (WR). EPS commissioned at the new discovery Adiyakkamangalam in Cauvery Basin.

In November, Oil struck on South Patan structure in Gujarat and Lingala structure in Krishna Godawari Basin. New structures taken up for drilling at chandkadi in West Bengal (CR), Vettikadu in Cauvery (SR) and B-188 in Bombay offshore.

In December, Gas struck on 6k-29A structure in Kutch offshore. The new oil find Lingala in Krishna Godavari Basin put on production. For the first time, gas lift system at Balol well No.8 was found successful in heavy oil belt. A mobile SRP unit developed by WSS, Ahmedabad was tested successfully.

1990 In January, new ONGC owned BHEL rig in Mehsana (WR) commissioned. An 8" Oil line between Nada-GNAR (Gandhar) and an 18" Oil line between valod-Akhdol commissioned. Kanoda EPS in Mehsana project commissioned.

In Fabruary, Gas struck at B-188 structure in Bombay offshore and at Palej structure in Cambay Basin. Gas compressor plant at Kalol, a 300 MM oil pipeline from Lanwa to Balol and a 300 MM feeder line from GGS-2 to GGS-7 of Balol-Lanwa main line commissioned BHEL, a new ONGC owned rig, commissioned in Cauvery (SR).

In March, new structures taken up at Lahil in West Bengal (CR) and HBM in Bombay offshore for drilling. Neelam field in Western offshore put on production (12000 BOPD). Asia's first IN-SITU combustion Pilot Project commissioned at Balol in Mehsana project. Gas supply started to Sonari Tea Gas Grid in ERBC. Gas supply network to Nazira colony completed.

3. ONGC VIDESH LIMITED (ONGC OVERSEAS) New Delhi

1989 The name of the Company is changed from Hydrocarbons India Limited to ONGC Videsh Limited.

Sagar Sandhani, ONGC's vessel completed seismic survey covering 6200 line Kilometers in Vietnam.

ONGC Videsh Limited signs an agreement with AGIP, Malaysia for 25% participating interest in SK-9 Block.

Overseas operations of ONGC are transferred to ONGC Videsh Limited.

4. Gas Authority of India Limited, New Delhi

1989 In May, Government approved setting up of LPG plant Phase-II at Vijaipur, Guna.

In July, Babrala-Delhi Pipeline Section commissioned. Contract for supply of gas signed with DESU, Delhi. HBJ Gas Pipeline Project completed. DESU Terminal became operational (supply of gas started).

In November, contract for supply of gas signed with Samtel Color Limited.

B. REFINING

1. Bharat Petroleum Corporation Limited, Bombay

1989 In May, BPCL along with National Chemical Laboratory, Davy Power Gas and Centre for High Technology formally launched Rs.6 crore Pilot Plant Project at the refinery for converting Natural Gas into Middle Distillates. BPCL also commissioned a modern Bunkering Installation at Nhava Sheva port.

In October, for the first time, 37,124 tonnes of LABUAN Crude (a new type of crude) was processed.

In December, a new SBP/Hexane unit and the C3/C4 splitter Unit were commissioned.

1990 In February, Miri Light Crude was processed for the first time at the Refinery. With this, 37 different types of crudes have so far been processed at BPCL refinery.

In March, 7 million tonnes per annum crude processing mark was surpassed for the first time.

2. Bongaigaon Refinery & Petrochemicals Limited, Assam

1989 BRPL entered into the International Market during the year for sale of Polyester Steple Fibre. First lot of export of Polyester Steple Fibre products to Bangladesh was started in November 1989.

3. Cochin Refineries Limited, Kerala

1989 In April, the company changed over from Pneumatic Process Control System to Distributed Control System (DIDC) in the primary units while the plant was in operation.

In May, CRL was selected for the Energy Conservation Award instituted by the Kerala State Productivity Council for the best performance for the year 1988-89.

In July, Toluene production facilities were commissioned.

In November, CRL was admitted as a member of the National Petroleum Refiners Association (NPRA), USA.

In the year 1989-90 the following records in production have been achieved -

i) LPG 1,51,779 Tonnes

ii) MS 4,70,270 Tonnes

iii) HSD 19,30,088 Tonnes

4. Hindustan Petroleum Corpn.Limited, Bombay & Vizag

1989 In June, captive power plant of Bombay Refinery was commissioned.

In September, Bombay Refinery achieved the landmark of processing 100 million tonnes Crude from its inception.

1990 In March, Bombay and Vizag refineries recorded the highest ever Crude throughput of 5.75 million tonnes and 4.28 million tonnes respectively.

HPCL's Management Development Institute at Nigdi near Pune has been selected by the Bureau of Public Enterprises for training employees of other PSUs under the Colombo Plan in conjunction with the British Council.

5. Indian Oil Corporation Limited,

(i) Assam Oil Division, Digboi (Assam)

1989 Digboi Refinery turned out a crude throughput of 570,286 MT during the year achieving a capacity utilisation of 114.1%.

The highest ever production of motor spirit and Aromek, 60981 MT and 16122 MT respectively, were achieved. An effluent Treatment plant fully commissioned in June, 1989. One 385 KW Steam Turbine Driven Generator commissioned resulting in energy conservation and overall saving of Rs.18.4 lacs per year.

One Gas Liquid Chromatograghy Apparatus Commissioned. And one Jet Blasting machine was also procured and put in service for quick/efficient cleaning of Heat condenser tubes to reduce plant downtime. A TEL Blending plant for Motor Spirit was also commissioned.

(ii) Barauni Refinery, Barauni, Bihar.

1989 Desalter in AVU-I commissioned and production of ATF recommenced.

1990 Government approval accorded for installation of Catalytic reformer and the Bio-treater project completed.

(iii) Gujarat Refinery, Koyali, Gujarat

1989 Regular loading of LPG Bogie Tank Wagons and POL Bogie Tank Wagons commenced. A metal deactivator dosing in MS also started.

1990 One 1,25,000 KL additional HSD tank completed and Revamping of reformer to produce/supply C-8 reformate to IPCL's additional Xylene project completed and commissioned.

(iv) Haldia Refinery Project, Haldia, West Bengal.

1989 DIDC system of Process control commissioned in TPS. BN S.Wax supplies commenced for the first time.

1990 Extended Tank Wagon loading gantry from 2x20 points to 2x40 points commissioned. The refinery received the British Safety Council Award for the year 1989 in recognition of achieving best safety performance.

(v) Mathura Refinery, Mathura, Uttar Pradesh.

1989 Regular Loading of POL Bogie Tank Wagons (BTPN) commenced.

(vi) Guwahati Refinery, Guwahati, Assam.

1989 Production of ATF commenced.

(b) Pipelines Division

1989 In July, usage of Drag Reducer in MJPL was started on a regular basis in Delhi-Ambala station. MJPL achieved an all-time record pumping of 342.9 Th.MTs since inception using drag reducer.

In September, GSPL achieved an all-time record pumping of 70.449 Th.MTs since inception. And Chaksu pump station of SMPL was also successfully commissioned.

In October, Microprocessor based Digital Control System along with other instruments commissioned at Chaksu.

In December, Jalandhar Station of MJPL received an all time record delivery of 136.6 Th.MTs since inception. Mainline engine No. II commissioned at Chaksu thus completing the entire job of modification of SMPL for handling Bombay High Crude in unlimited parcel size during winter.

1990 In January, KAPL received the "Award of Honour" for accident free manhours worked since 1972 to 1988 from National Safety Council, Chicago.

In March, KAPL and SMPL achieved an all time record pumping of 110.326 Th.MTs and 1116.358 Th.MTs respectively since inception. SMPL, Vadinar received an all time record quantity of 1174.159 Th.MTs crude since inception. VM section of SMPL delivered an all-time record quantity of 765.803 Th.MTs of Crude to Mathura Refinery since inception. A record number of 16 tankers were unloaded at Vadinar. Trial run of drag reducer was done successfully in KAPL.

6. Madras Refineries Limited, Tamil Nadu

1989 In March, MRL has commenced Marketing of Propylene.

In June, a Mock Drill was conducted in Refinery for imaginated fire emergency.

In December, MRL got U.S. safety award for the 5th time.

1990 In March, MRL commenced supply of Hydrocarbon Polybutene feedstocks to M/s.Kothari Sugars & Chemicals Ltd.

C. MARKETING

1. Bharat Petroleum Corporation Limited, Bombay.

1989 In August, BPCL has signed a "Long Term Agreement" with the Union Ministry of Defence for the supply of "Aviation Fuel" to the Indian Air Force. This agreement is for a period of 20 years. The LPG Bottling Plant at Sholapur (Capacity 22,000 TPA) was commissioned.

1990 In February, BPCL exported 3128 tonnes of Benzene, conalised through STC. The total foreign exchange earned was approx. $ 1 million. This was the first ever export of Benzene by the Corporation.

2. Hindustan Petroleum Corporation Ltd., Bombay

1989 In June, LPG bottling Plant at Hoshiarpur with a capacity of 5000 tonnes per year was commissioned.

In August, another LPG bottling Plant at Gandhinagar with a capacity of 5000 tonnes per year was commissioned.

1990 In January, LPG bottling plant at Kasna with a capacity of 5000 tonnes per year was commissioned.

In February, LPG bottling plant at Unnao with a capacity of 5000 tonnes per year was completed.

In the fiscal year, sales volume reached an all time high of 10.32 million tonnes registering an increase of 9.1% over the previous year. The Bombay-Pune pipeline handled more than 2 million tonnes products registering capacity utilisation of over 100%.

3. IBP Company Limited

1989 In August, one 6000 TPA SHS Bulk Explosives Plant was commissioned at Block-II, Dhanbad.

In September, Lube Oil Blending Plant at Budge in Calcutta, envisaged for producing IBP's own brand of Lube Oil commenced.

1990 In January, IBP has commenced documentation and direct billing to customers. The company selected as the implementing agency for the fourth refinery in Assam to be set up as a part of the Assam Accord.

In March, Mathura Depot was commissioned. Production and sales crossed the installed capacity of 10,000 tonnes by more than 18%.

4. Indian Oil Corporation Limited

(a) Indian Oil Corporation Limited, Bombay.

1989 In May, LPG Bottling Plant of 800 MT per annum at Hardwar (U.P.) commissioned and for the first time SKO was moved by barge to the North-East (Budge-Budge to Badarpur Ghat) to utilise the inland waterways.

In June, nine locations bagged British Safety Council awards for 1988. Hydrant Refuelling System Phase-III was completed at Sahar Airport (Bombay).

In August, Aviation Fuel Stations commissioned at Kandla (Gujarat), Nal (Rajasthan), Avantipur and Udhampur (J&K).

In September, Aviation Fuel Station at Port-Blair and Indane Cooking Gas marketing began in Goa by commissioning of Army supply core distributorship at Margao. Construction of new Aviation Fuel Station at Port-Blair was also completed.

In October, diagnostic computerised equipment for heavy vehicles started for the first time in the country at Deonar, Bombay.

In November, 19 KG LPG Cylinder for commercial/industrial use introduced in Lucknow area.

In December, aviation fuel station at Ludhiana (Punjab) commissioned and 19 Kg. LPG cylinder filling started at Bangalore and introduced in the commercial market.

1990 In February, IOC selected to refuel aircrafts of the Paris-Singapore-Paris, 2nd Air Rally race.

In March, Hydrant Refuelling at Goa for Indian Navy commissioned.

b) Assam Oil Division (AOD)

1989 AOD achieved 102.2% of adjusted sales plan. MS sales registered a growth of 13.2% against industry growth of 9.3% in the North East.

SKO/LDO dealership and LPG distribution were 160.0% of the target. Additional tankage of 1400 KL at Doimukh and 1000 KL at Dharmanagar depots were added and AOD's Bulk Bitumen sales during 1989-90 was highest ever.

D R & D ACTIVITIES

1. Indian Institute of Petroleum, Dehradun

1989 In May, the CSIA consultancy to ONGC's project on transportation of high wax BH Crude through sub-sea pipeline was completed. IIP fabricated a 1.5 meter dia kiln for Forest Research Institute to study the charcoal.

In September, sulpholane extraction plant with the capacity of 68,000 TPA of aromatics based on IIP-EIL technology has been accepted by M/s.NAPCO. IIP-EIL technology for production of Food Grade Hexane has been accepted by Madras Refineries Limited. The steps for setting up the Plant (25,000T/A) have already been initiated by MRL. IIP has developed two engine test methods for performance evaluation of 2-stroke engine lubricants (2T oils) of TSV level.

In November, a vapour liquid/liquid-liquid equilibria facility for measurement of phase equilibria under high pressure and super critical conditions has been commissioned. A high speed camera capable for filming 100-11000 frames per second was installed. This will be used for combustion studies in engines.

1990 IIP and HPCL had signed an MOU for the development of NMP extraction technology for food grade hexane.

In February, the hot rolling oil developed by IIP was put on plant trials at Bombay. The results are encouraging. The food grade hexane Plant processing 600 t/day demonstration feed and producing 75 t/day food grade hexane and 263 t/day special boiling Point solvent based on IIP-EIL sulpholane extraction technology was commissioned at BPCL, Bombay. IIP-IFP naphtha Pretreator unit having a capacity of 1,28,000 t/yr was commissioned at IPCL with the participation of IIP scientists.

2.Indian Oil Corporation Limited

Research & Development Centre, Faridabad

1989-90 Formulations of 91 products in the categories of automotive oils, industrial oils, metal working oils, greases and specialities were developed and issued during the year. These include 15 new products. Field trials were also undertaken on 19 products with various users including the Railways, Defence Services, Steel Plants, Maruti Udyog, Kinetic Honda and others.

Engine Builders approvals were obtained on 21 products from various International equipment manufacturers and users.

INDIAN PETROLEUM INDUSTRY PROGRESS AT A GLANCE (1947-48 - 1989-90)

Year	Balance of recoverable reserves @ Crude oil (MMT)	Natural gas (Bn.M3)	crude oil production (MMT)	Natural gas production (Bn.M3)	Refinery crude th'put (MMT)	Refinery production (MMT)	Consumption * (MMT)	Gross Imports Crude oil (MMT/Rs.Crores)	Gross Imports POL products (MMT/Rs.Crores)	Net Imports Crude oil/POL Products Qty. (MMT)	Net Imports Crude oil/POL Products Value (Rs./crores)	c.i.f. unit value of crude imports (Rs./MT)	India's total Imports/Exports Imports (Rs.crores)	India's total Imports/Exports Exports (Rs.crores)	%age of POL imports to India's Export's	Central Excise & Custom duties on POL (Rs./crores)	Index of Self reliance
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1947-48	4	3	.25	NA	.25	.23	2.72	-	2.36	NA	NA	-	NA	NA	NA	NA	9%
1950-51	4	2	.26	NA	.26	.23	3.46	-	3.11	NA	NA	-	NA	NA	NA	NA	7%
1960-61	45	22	.45	NA	6.13	5.78	7.99	5.71 (39)	2.22 (35)	7.71	43	68	NA	NA	NA	124	5%
1970-71	128	62	6.82	1.4	18.38	17.11	17.91	11.68 (107)	1.09 (30)	12.43	132	92	1634	1535	8.9%	638	36%
1975-76	144	88	8.45	2.4	22.28	20.83	22.45	13.62 (1052)	2.22 (204)	15.67	1242	772	5265	4036	31.1%	1155	35%
1976-77	275	185	8.90	2.4	23.00	21.43	24.10	14.05 (1176)	2.62 (248)	16.60	1417	837	5074	5142	27.7%	1222	35%
1977-78	303	228	10.76	2.8	24.90	23.22	25.54	14.51 (1246)	2.88 (308)	17.34	1546	859	6020	5408	28.7%	1279	38%
1978-79	347	266	11.63	2.8	25.97	24.20	28.24	14.66 (1251)	3.88 (430)	18.49	1677	853	6811	5726	29.4%	1480	38%
1979-80	354	344	11.77	2.8	27.47	25.79	29.88	16.12 (2188)	4.72 (1082)	20.76	3246	1357	9143	6418	51.0%	1620	36%
1980-81	366	352	10.51	2.4	25.84	24.12	30.90	16.25 (3349)	7.29 (1917)	23.50	5258	2061	12549	6711	78.5%	1512	30%
1981-82	468	411	16.19	3.9	30.15	28.18	32.52	15.30 (3736)	4.88 (1453)	19.29	4978	2442	13608	7806	66.5%	1582	45%
1982-83	471	420	21.06	4.9	33.16	31.07	34.66	16.95 (4044)	5.03 (1554)	16.83	4401	2386	14293	8803	63.6%	1664	55%
1983-84	527	475	26.02	6.0	35.26	32.89	35.84	15.97 (3541)	4.33 (1271)	13.30	3224	2217	15832	9771	49.2%	1649	66%
1984-85	511	478	28.99	7.2	35.56	33.23	38.80	13.64 (3430)	6.09 (1915)	12.32	3527	2515	17134	11744	45.5%	2077	70%
1985-86	500	479	30.17	8.1	42.91	39.88	40.87	15.14 (3687)	3.87 (1274)	16.52	4316	2435	19658	10895	45.5%	2895	64%
1986-87	558	497	30.48	9.8	45.70	42.76	43.66	15.48 (2120)	3.05 (653)	16.03	2362	1370	20096	12452	22.1%	3165	66%
1987-88	581	541	30.36	11.5	47.75	44.73	46.42	17.73 (2986)	3.95 (979)	18.27	3316	1693	22399	15741	25.5%	4419	61%
1988-89	638	579	32.04	13.2	48.80	45.70	50.09	17.81 (2863)	6.26 (1516)	21.77	3855	1608	28194	20302	21.6%	4879	60%
1989-90 (P)	726	648	34.09	17.0	51.94	48.69	54.10	19.49 (4090)	6.54 (2228)	23.44	5622	2099	35412	27681	23.0%	5483	59%

NA = Not available. (P)=Provisional. @ = As on 1st January of initial years.
* = Excluding RBF

COMMODITY BALANCE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS

(Million Tonnes)

Items	1970-71	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90*
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
I.CRUDE																
1.Refinery Thr'put	18.4	22.3	23.0	24.9	26.0	27.5	25.8	30.2	33.2	35.3	35.6	42.9	45.7	47.8	48.8	51.9
2.Domestic Production	6.8	8.4	8.9	10.8	11.6	11.8	10.5	16.2	21.1	26.0	29.0	30.2	30.5	30.4	32.0	34.1
(a) Onshore	6.8	8.4	8.5	8.7	8.3	7.3	5.5	8.2	8.2	8.6	8.9	9.4	9.9	10.2	10.9	12.4
(b) Offshore	-	--	0.4	2.1	3.3	4.4	5.0	8.0	12.9	17.4	20.1	20.8	20.6	20.2	21.1	21.7
3.Imports	11.7	13.6	14.0	14.5	14.7	16.1	16.2	15.3	16.9	16.0	13.7	15.1	15.5	17.7	17.8	19.5
4.Exports	-	--	--	--	--	--	--	0.8	4.5	5.5	6.5	0.5	--	--	--	--
5.Net Imports(3-4)	11.7	13.6	14.0	14.5	14.7	16.1	16.2	14.5	12.4	10.5	7.2	14.6	15.5	17.7	17.8	19.5
II.PRODUCTS																
1.Domestic Consumption of which @	17.9	22.4	24.1	25.5	28.2	29.9	30.9	32.5	34.7	35.8	38.8	40.9	43.7	46.4	50.1	54.1
(a) Naphtha	0.9	1.8	2.2	2.3	2.5	2.4	2.3	3.0	3.0	2.8	3.1	3.1	3.2	2.9	3.4	3.4
(b) Kerosene	3.3	3.1	3.3	3.6	4.0	3.9	4.2	4.7	5.2	5.5	6.0	6.2	6.6	7.2	7.7	8.2
(c) High Speed Diesel	3.8	6.6	7.1	7.7	8.6	9.8	10.3	10.8	12.0	12.6	13.7	14.9	16.0	17.7	18.8	20.7
(d) Fuel Oils	4.7	5.8	5.7	5.8	6.7	7.1	7.5	7.2	7.3	7.6	7.9	7.9	8.0	8.1	8.5	8.8
2.Domestic Production of which	17.1	20.8	21.4	23.2	24.2	25.8	24.1	28.2	31.1	32.9	33.2	39.9	42.8	44.7	45.7	48.7
(a) Naphtha	1.2	1.9	2.0	2.1	2.3	2.4	2.1	3.0	3.0	3.6	3.5	5.0	5.4	5.5	5.4	5.2
(b) Kerosene	2.9	2.4	2.6	2.5	2.5	2.5	2.4	2.9	3.4	3.5	3.4	4.0	4.9	5.1	5.2	5.7
(c) High Speed Diesel	3.8	6.3	6.4	7.1	7.4	8.0	7.4	9.0	9.8	10.9	11.1	14.6	15.5	16.3	16.7	17.7
(d) Fuel Oils	4.1	5.1	4.7	5.3	5.6	6.4	6.1	6.9	8.0	8.0	7.9	8.0	8.0	8.5	8.9	9.0
3.Imports	1.1	2.2	2.6	2.9	3.9	4.7	7.3	4.9	5.0	4.3	6.1	3.9	3.1	3.9	6.3	6.5
4.Exports @@	0.3	0.2	0.1	0.1	0.1	0.1	Neg.	0.1	0.8	1.5	0.9	2.0	2.5	3.4	2.3	2.6
5.Net Imports (3-4)	0.8	2.0	2.5	2.8	3.8	4.6	7.3	4.8	4.2	2.8	5.2	1.9	0.6	0.5	4.0	3.9

* Provisional
Neg. Negligible
@ Excluding Refinery Fuel Consumption
@@ Excluding supplies of POL Products to Nepal from 1970-71 to 1982-83.

V. GROWTH OF PETROLEUM INDUSTRY IN INDIA

(Calender Year) (000 Tonnes)

Year	Crude oil		Petroleum Products	
	Refineries			
	Production	Crude Throughput	Production	Consumption*
1	2	3	4	5
1960	451	6091	5747	7964
1965	3022	9754	9113	12356
1970	6809	18459	17172	18816
1971	7185	19588	18225	20706
1972	7373	19672	18198	22675
1973	7198	20518	19089	23726
1974	7490	20783	19241	23023
1975	8283	21835	20368	23541
1976	8659	22762	21188	24897
1977	10185	24430	22795	26570
1978	11271	25626	23877	28894
1979	12839	28153	26360	31306
1980	9399	25075	23597	31633
1981	14925	29528	27575	34037
1982	19734	32107	29984	35403
1983	25148	34534	32298	37223
1984	27933	35235	32963	39934
1985	29860	41226	38264	42973
1986	31157	44940	41877	45483
1987	30142	47440	44583	48048
1988	31580	47896	44730	51308
1989	33685	51974	48724	55801

Rs./Crores

Year	GROSS IMPORTS			EXPORTS/RE-EXPORTS			NET POL IMPORTS (col.8-11)
	Crude Oil	Products	Total	Crude Oil	Products	Total	
1	6	7	8	9	10	11	12
1960	40.57	41.02	81.59	-	4.61	4.61	76.98
1965	40.38	44.73	85.11	-	3.92	3.92	81.19
1970	102.36	30.53	132.89	-	5.72	5.72	127.17
1971	139.88	43.49	183.37	-	2.55	2.55	180.82
1972	144.25	56.69	200.94	-	8.94	8.94	192.00
1973	244.56	88.03	332.59	0.42	5.35	5.77	326.82
1974	899.36	209.90	1109.26	-	19.37	19.37	1089.89
1975	992.02	199.46	1191.48	-	13.83	13.83	1177.65
1976	1145.56	219.70	1365.26	-	7.60	7.60	1357.66
1977	1258.92	272.99	1531.91	-	6.50	6.50	1525.41
1978	1243.89	414.13	1658.02	-	4.20	4.20	1653.82
1979	1787.38	727.56	2514.94	-	14.94	14.94	2500.00
1980	3038.66	1788.28	4826.94	-	17.98	17.98	4808.96
1981	3793.83	1638.58	5432.41	-	15.13	15.13	5417.28
1982	4116.89	1551.37	5668.26	1044.71	101.23	1145.94	4522.32
1983	3471.47	1246.60	4718.07	1041.87	286.64	1328.51	3389.56
1984	3525.15	1850.31	5375.46	1598.55	271.63	1870.18	3505.28
1985	3808.74	1440.70	5249.44	503.88	482.06	985.94	4263.50
1986	2069.65	818.06	2887.71	-	389.32	389.32	2498.39
1987	3105.25	884.69	3989.94	-	662.07	662.07	3327.87
1988	2811.28	1273.36	4084.64	-	472.85	472.85	3611.79
1989(P)	3718.63	2091.42	5810.05	-	500.05	500.05	5309.55

(P) = Provisional.

* = Including Refinery Fuel.

GROWTH OF PETROLEUM INDUSTRY IN INDIA

(Financial Year) (000 Tonnes)

Financial Year	Crude Oil		Petroleum Products	
	Production	Refineries Crude Throughput	Production	Consumption*
1	2	3	4	5
1960-61	448(e)	6130	5777	8285
1965-66	3473	10233	9561	12437
1970-71	6822	18379	17110	19135
1971-72	7299	20042	18639	21299
1972-73	7321	19328	17830	22978
1973-74	7189	20958	19495	23574
1974-75	7684	21094	19603	23302
1975-76	8448	22283	20829	23673
1976-77	8898	22995	21432	25400
1977-78	10763	24898	23219	26990
1978-79	11633	25974	24193	29719
1979-80	11766	27474	25794	31323
1980-81	10507	25836	24123	32261
1981-82	16194	30146	28182	34107
1982-83	21063	33156	31073	36395
1983-84	26020	35263	32926	37776
1984-85	28990	35556	33236	40828
1985-86	30168	42910	39881	43363
1986-87	30480	45699	42761	46274
1987-88	30357	47744	44728	48938
1988-89	32040	48803	45699	52882
1989-90(P)	34087	51942	48690	56779

(Rs/Crores)

Financial Year	GROSS IMPORTS			EXPORTS/RE-EXPORTS			NET POL IMPORTS
	Crude Oil	Products	Total	Crude Oil	Products	Total	
(1)	6	7	8	9	10	11	12
1960.61	39.23	39.84	79.07	—	4.40(e)	4.40	74.67
1965-66	39.62	40.68	80.30	—	4.39	4.39	75.91
1970-71	106.72	29.91	136.63	—	4.67	4.67	131.96
1971-72	147.02	46.98	193.90	—	3.91	3.91	189.99
1972-73	146.37	60.58	206.95	—	8.16	8.16	198.79
1973-74	416.39	124.50	540.89	0.42	8.05	8.47	532.42
1974-75	916.99	195.00	1111.99	—	17.46	17.46	1094.53
1975-76	1051.76	204.34	1256.10	—	13.96	13.96	1242.14
1976-77	1175.91	248.23	1424.14	—	6.89	6.89	1417.25
1977-78	1246.20	305.34	1551.54	—	5.69	5.69	1545.85
1978-79	1251.17	429.99	1681.16	—	4.11	4.11	1677.05
1979-80	2187.53	1082.39	3269.92	—	24.02	24.02	3245.90
1980-81	3348.97	1917.52	5266.49	—	8.41	8.41	5258.08
1981-82	3706.38	1453.16	5189.54	196.23	15.13	211.36	4978.18
1982-83	4043.74	1553.94	5597.68	1063.37	133.79	1197.16	4400.52
1983-84	3541.05	1270.75	4811.80	1231.10	356.96	1588.06	3223.74
1984-85	3430.34	1914.91	5345.25	1563.16	255.03	1818.19	3527.06
1985-86	3686.80	1273.60	4960.40	135.15	509.58	644.73	4315.67
1986-87	2120.19	652.70	2772.89	—	411.23	411.23	2361.66
1987-88	2986.31	978.69	3965.00	—	648.75	648.75	3316.25
1988-89	2862.80	1516.59	4378.39	—	523.63	523.63	3854.76
1989-90(P)	4089.55	2227.82	6317.37	—	695.56	695.56	5621.81

* = including Refinery Fuel (P) = Provisional. (e) = Estimated.

V. PETROLEUM ENERGY

PETROLEUM ENERGY IN INDIA 1982 - 1989 (Calendar Years)

A V A I L A B I L I T Y					
PRODUCTS	1982	1984	1986	1988	1989
1	2	3	4	5	6
	IN ORIGINAL UNITS @ (MILLION TONNES)				
Kerosene	5.19	5.96	6.77	7.26	8.17
ATF	1.31	1.42	1.64	1.66	1.86
HSD	11.77	13.42	15.96	17.13	20.91
LDO	1.11	1.21	1.17	1.23	1.51
Fuel Oils	7.21	7.78	7.91	7.98	8.80
Others*	3.97	4.88	6.55	7.02	7.37
Total	30.56	34.67	40.00	42.28	48.62
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @				
Kerosene	10.38	11.92	13.54	14.52	16.34
ATF	2.62	2.84	3.28	3.32	3.72
HSD	23.54	26.84	31.92	34.26	41.82
LDO	2.22	2.42	2.34	2.46	3.02
Fuel Oils	14.42	15.56	15.82	15.96	17.60
Others*	7.94	9.76	13.10	14.04	14.74
Total	61.12	69.34	80.00	84.56	97.24
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @				
Kerosene	41.52	47.69	54.16	58.08	65.36
ATF	9.83	10.62	12.30	12.45	13.95
HSD	105.93	120.74	143.64	154.17	188.19
LDO	9.99	10.91	10.53	11.07	13.59
Fuel Oils	14.42	15.56	15.82	15.96	17.60
Others*	21.09	26.61	32.51	36.04	38.32
Total	202.78	232.13	268.96	287.77	337.01

C O N S U M P T I O N (#)					
PRODUCTS	1982	1984	1986	1988	1989
1	2	3	4	5	6
	IN ORIGINAL UNITS (MILLION TONNES)				
Kerosene	5.13	5.84	6.52	7.59	8.07
ATF	1.13	1.30	1.59	1.69	1.76
HSD	11.64	13.31	15.70	18.40	20.29
LDO	1.05	1.18	1.15	1.38	1.46
Fuel Oils	7.13	7.79	8.02	8.32	8.56
Others*	3.84	4.93	6.47	7.32	8.15
Total	29.92	34.35	39.45	44.70	48.29
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @				
Kerosene	10.26	11.68	13.04	15.18	16.14
ATF	2.26	2.60	3.18	3.38	3.52
HSD	23.28	26.62	31.40	36.80	40.58
LDO	2.10	2.36	2.30	2.76	2.92
Fuel Oils	14.26	15.58	16.04	16.64	17.12
Others*	7.68	9.86	12.94	14.64	16.30
Total	59.84	68.70	78.90	89.40	96.58
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @				
Kerosene	41.04	46.72	52.16	60.72	64.56
ATF	8.48	9.75	11.93	12.68	13.20
HSD	104.76	119.79	141.30	165.60	182.61
LDO	9.45	10.62	10.35	12.42	13.14
Fuel Oils	14.26	15.58	16.04	16.64	17.12
Others*	20.44	26.38	34.95	38.06	42.38
Total	198.43	228.84	266.73	306.12	315.89

(P) = Provisional. * Includes LPG, Gasolines, Refinery Gas and Refinery Fuel.@ Based on conversion factors adopted by FPC, 1974.
(#) Inlcudes Petroleum Products used for power generation.

PETROLEUM ENERGY IN INDIA: 1982-1983 TO 1989-90. (Financial Years)

A V A I L A B I L I T Y						
PRODUCTS	1982-83	1984-85	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7
	IN ORIGINAL UNITS (MILLION TONNES)					
Kerosene	5.27	5.93	6.76	7.29	7.95	8.30
ATF	1.38	1.41	1.64	1.74	1.79	1.84
HSD	12.34	13.59	16.13	17.54	19.00	20.79
LDO	1.12	1.25	1.16	1.26	1.47	1.54
Fuel Oils	7.29	7.89	7.91	7.86	9.31	9.17
Others*	4.13	5.15	6.59	7.14	7.82	8.50
Total	31.58	35.22	40.19	42.83	47.34	50.14
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	10.54	11.86	13.52	14.58	15.90	16.60
ATF	2.76	2.82	3.28	3.48	3.58	3.68
HSD	24.68	27.18	32.26	35.08	38.00	41.58
LDO	2.24	2.50	2.32	2.52	2.94	3.08
Fuel Oils	14.58	15.78	15.82	15.72	18.62	18.34
Others*	8.26	10.30	13.18	14.28	15.64	17.00
Total	63.06	70.44	80.38	85.66	94.68	100.28
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	42.16	47.44	54.08	58.32	63.60	66.40
ATF	10.35	10.58	12.30	13.05	13.43	13.80
HSD	111.06	122.31	145.17	157.86	171.00	187.11
LDO	10.08	11.25	10.44	11.34	13.23	13.86
Fuel Oils	14.58	15.78	15.82	15.72	18.62	18.34
Others*	21.99	27.95	33.11	36.86	40.35	44.20
Total	210.22	235.31	270.92	293.15	320.23	325.37

C O N S U M P T I O N (#)						
PRODUCTS	1982-83	1984-85	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7
	IN MILLION TONNES UNITS (MILLION TONNES)					
Kerosene	5.21	5.96	6.65	7.23	7.73	7.38
ATF	1.15	1.34	1.60	1.65	1.71	1.78
HSD	12.01	13.70	16.01	17.66	18.80	20.69
LDO	1.07	1.20	1.16	1.24	1.44	1.46
Fuel Oils	7.30	7.94	8.05	8.14	8.46	8.64
Others*	4.08	5.07	6.62	7.14	7.80	8.42
Total	30.82	35.21	40.09	43.06	45.94	48.37
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	10.42	11.92	13.30	14.46	15.46	14.76
ATF	2.30	2.68	3.20	3.30	3.42	3.56
HSD	24.02	27.40	32.02	35.32	37.60	41.38
LDO	2.14	2.40	2.32	2.48	2.88	2.92
Fuel Oils	14.60	15.88	16.10	16.28	16.92	17.28
Others*	8.16	10.14	13.24	14.28	15.60	16.84
Total	61.64	70.42	80.18	86.12	91.88	96.74
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	41.68	47.67	53.20	57.84	61.84	59.04
ATF	8.63	10.02	12.00	12.38	12.83	13.35
HSD	108.09	123.26	144.09	158.94	169.20	186.21
LDO	9.63	10.78	10.44	11.16	12.96	13.14
Fuel Oils	14.60	15.88	16.10	16.28	16.92	17.28
Others*	21.61	27.82	38.02	39.85	40.56	43.78
Total	203.24	234.93	271.85	296.45	314.31	332.80

(P)=Provisional. * Includes LPG, Gasolines, Refinery Gas and Refinery Fuel.
(@) Based on conversion factors adopted by FPC, 1974.
(#) Includes Petroleum Products used for power generation.

VI. EXPLORATION

AREA WISE DEPLOYMENT OF DEEP DRILLING RIGS, WELLS & METERAGE DRILLED BY ONGC & OIL FROM 1970-71 TO 1989-90.

YEAR	ONSHORE			OFFSHORE			TOTAL		
	Rigs (Nos.)	Wells (Nos.)	Metreage ('000')	Rigs (Nos.)	Wells (Nos.)	Metreage ('000')	Rigs (Nos.)	Wells (Nos.)	Metreage ('000')
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			(A.)	OIL & NATURAL GAS COMMISSION:					
1970-71	31	89	168	1	--	1	32	89	168
1975-76	35	106	229	4	15	28	39	121	257
1980-81	34	72	134	7	32	78	41	104	212
1981-82	38	98	211	7	46	111	45	144	322
1982-83	40	114	224	13	64	162	53	178	386
1983-84	43	117	259	14	88	209	57	205	468
1984-85	53	127	280	13	73	161	66	200	441
1985-86	64	190	410	18	77	180	82	267	590
1986-87	82	232	502	19	77	231	101	309	733
1987-88	92	272	577	26	91	266	118	363	843
1988-89	104	319	707	33	146	282	137	465	989
1989-90*	115	491	971	33	134	353	148	625	1324
			(B.)	OIL INDIA LIMITED:					
1970-71	4	12	48	--	--	--	4	12	48
1975-76	3	11	36	--	--	--	3	11	36
1980-81	4	9	33	1	1	4	5	10	37
1981-82	5	17	64	--	--	--	5	17	64
1982-83	5	14	60	--	--	--	5	14	60
1983-84	5	23	79	1	3	10	6	26	88
1984-85	7	25	86	1	2	10	8	27	96
1985-86	8	28	110	1	--	9	9	28	119
1986-87	10	26	103	2	2	17	12	28	120
1987-88	12	32	118	1	--	6	13	32	124
1988-89	13	33	128	--	--	--	13	33	128
1989-90*	15	28	130	--	--	--	15	28	130
				TOTAL (A + B):					
1970-71	35	101	216	--	--	1	36	101	216
1975-76	38	117	265	4	15	28	42	132	293
1980-81	38	81	167	8	33	82	46	114	249
1981-82	43	115	275	7	46	111	50	161	386
1982-83	45	128	284	13	64	162	58	192	446
1983-84	48	140	338	15	91	219	63	231	556
1984-85	60	152	366	14	75	171	74	227	537
1985-86	72	218	520	19	77	189	91	295	709
1986-87	92	258	605	21	79	248	113	337	853
1987-88	104	304	695	27	91	272	131	395	967
1988-89	117	352	835	33	146	282	150	498	1117
1989-90*	130	519	1101	33	134	353	163	653	1454

* = Provisional.

EXPLORATORY & DEVELOPMENT DRILLING DONE BY ONGC & OIL.

Y E A R	Exploratory		Development		Total	
	Wells (Nos.)	Metreage ('000')	Wells (Nos.)	Metreage ('000')	Wells (Nos.)	Metreage ('000')
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			ON SHORE			
1970-71	51+1P	106	50+3P	112	101+3P	218
1975-76	49+1P	120	68+1P	145	117+2P	265
1980-81	44+1P	96	38+2P	71	82+3P	167
1981-82	52+2P	130	63+4P	145	115+6P	275
1982-83	57+3P	128	71+4P	156	128+7P	284
1983-84	61+3P	157	79+2P	181	140+5P	338
1984-85	70+5P	186	82+1P	180	152+6P	366
1985-86	90+4P	237	128+7P	283	218+11P	520
1986-87	78+3P	236	180+8P	369	258+11P	605
1987-88	105+4P	307	199+8P	388	304+12P	695
1988-89	122	362	230	474	353	836
1989-90*	204	508	315	593	519	1101
			OFFSHORE			
1970-71	--	1	--	--	--	1
1975-76	10	19	5	9	15	28
1980-81	15+1P	40	18	42	33+1P	82
1981-82	12	39	34	72	46	111
1982-83	17	57	47	105	64	162
1983-84	22+1P	70	68	149	90+1P	219
1984-85	20+1P	62	51	109	71+1P	171
1985-86	33+2P	100	44	89	77+2P	189
1986-87	44+3P	132	35	116	79+3P	248
1987-88	39+3P	111	52	161	91+3P	272
1988-89	63	167	83	114	146	281
1989-90*	61	160	73	193	134	353
			TOTAL (A + B) :			
1970-71	52+1P	107	50+3P	112	101+3P	218
1975-76	59+1P	139	73+1P	154	132+2P	293
1980-81	59+2P	136	56+2P	113	115+4P	249
1981-82	64+2P	169	97+4P	217	161+6P	386
1982-83	74+3P	185	118+4P	261	192+7P	446
1983-84	83+4P	227	147+2P	330	230	557
1984-85	90+6P	248	133+1P	289	223+7P	537
1985-86	123+6P	337	172+7P	372	295+13	709
1986-87	122+6P	368	215+8P	485	337+14P	853
1987-88	143+7P	418	251+8P	549	395+15P	967
1988-89	185	529	313	588	498	1117
1989-90*	265	668	388	786	653	1454

(P)-Partly Drilled. * Provisional

STATUS OF WELLS (AS ON 1ST APRIL OF EACH YEAR)

(NUMBERS)

Company/ Year	OIL	GAS	DRY	UNDER TEST	INJEC-CTION	OTHERS	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			A. Assam Oil Company *				
1975	377	7	-	-	5	612	1001
1980	417	10	-	-	6	568	1001
1981	418	9	-	-	6	568	1001
1985	431	4	305	7	7	247	1001
1986	399	2	305	7	6	282	1001
1987	314	2	305	2	8	370	1001
1988	289	2	305	-	7	398	1001
1989	240	1	305	-	10	445	1001
1990	253	1	305	-	7	435	1001
			B. Oil India Limited				
1975	250	18	34	27	20	-	349
1980	273	26	40	48	34	-	421
1981	283	27	42	48	35	-	435
1985	321	42	49	35	50	31	528
1986	327	37	52	12	53	81	562
1987	344	41	56	21	59	74	595
1988	333	44	61	29	62	108	637
1989	337	49	63	38	62	124	673
1990	422	53	66	36	62	70	709
			C. OIL & Natural Gas Commission				
1975	605	79	320	141	28	-	1173
1980	951	123	487	125	32	-	1718
1981	1008	133	508	137	38	-	1824
1985	1434	170	659	216	67	-	2546
1986	1642	190	740	164	80	-	2816
1987	1836	206	804	177	102	-	3125
1988	2024	219	896	20	125	204	3488
1989	2304	239	984	45	144	237	3953
1990	2579	302	1128	69	198	303	4579
			TOTAL (A + B + C)				
1975	1282	104	354	168	53	612	2523
1980	1641	159	527	173	72	568	3140
1981	1709	169	550	185	79	568	3260
1985	2186	216	1011	258	124	278	4073
1986	2368	229	1097	183	139	363	4379
1987	2494	249	1165	200	169	444	4721
1988	2646	265	1262	49	194	710	5126
1989	2881	289	1352	83	216	806	5627
1990	3254	356	1499	105	267	808	6289

* The exploration activities of Assam Oil Company were vested in Oil India Limited w.e.f. 14th October, 1981.

STATE-WISE ACHIEVEMENT OF GEOLOGICAL FIELD PARTIES BY ONGC/OIL SINCE INCEPTION UPTO MARCH, 1990.

(Square Kilometre) (Provisional)

	STATE	Detailed mapping	Semi - detailed mapping	Traversing Line	Reconnaissance	Special Studies	Geotectonic studies	Reconnatory Traversing
	1	2	3	4	5	6	7	8
1.	Andhra Pradesh	-	4507	-	5295	-	45000	-
2.	Tamil Nadu	2860	6955	271	11160	GC 595	-	-
3.	Assam (including Meghalaya, Nagaland Mizoram, Tripura, Arunachal Pradesh, Manipur & Nefa)	8005	47712	11440	4979	CW 740 Photo geo-logical 1100	-	167
4.	Gujarat	9529	25505	1624	25628	-	-	-
5.	Madhya Pradesh.	-	25691	-	-	-	-	-
6.	Bihar	-	5344	93	-	-	-	-
7.	Himachal Pradesh & Punjab.	9710	15784	4915	4568	1489	-	330 200 (RM)
8.	Jammu & Kashmir	1764	11527	1923	6548	70 + CH 372	- -	- -
9.	Uttar Pradesh	4658	12476	2087	913	4170	-	-
10.	Rajasthan	3584	26180	1734	17890	-	-	-
11.	Other areas falling in Vindhyan and Gondawana Basin	-	38095	-	-	-	-	-
12.	West Bengal	912	5390	477	2397	-	5400	-
13.	Andaman & Nicobar	833	4183	647	2151	-	-	-
14.	Nepal	194	8446	1087	-	-	-	-
15.	Bhutan	-	2636	95	270	-	-	-
16.	Maharashtra	-	670	-	-	-	-	-
	TOTAL :	42049	241101	26393	81799	5729 +CW 740 + Photo-geological 1100 +GC 595 +CH 372	50400 740	497 +RM 200

Abbre: RM-Road Mapping CW-Compilation Work CH-Checking lines. GC-Ground Checking.
No Geological Survey was carried out by OIL.

STATE-WISE ACHIEVEMENT OF GEOPHYSICAL FIELD PARTIES BY ONGC/OIL SINCE INCEPTION UPTO MARCH 1990.

(Provisional)

STATE	DEPARTMENTAL				CONTRACT		
	Line Kms.	SSKm 3-D	SLK		Line Kms.	SLK	S.Km. 3-D
1	2	3	4		5	6	7
1. Andhra Pradesh	7108	-	31020		2189	-	-
2. Assam (including Tripura Mizoram, Arunachal Pradesh, Meghalaya & Nagaland)	14707	91	47607		250	2708	-
3. Gujarat	43202	215	76065		9475	-	-
4. Bihar	2426	-	3102		-	-	-
5. Haryana	-	-	1536		-	-	-
6. Himachal Pradesh & Punjab.	5400	-	1668		-	549	-
7. Tamil Nadu	9636	117	27538		7425	-	-
8. Jammu & Kashmir	1937	-	-		99	-	-
9. Orissa	1644	-	-		-	3814	-
10. Uttar Pradesh	12190	20162	-		-	-	-
11. Rajasthan	3554	-	19795		4105	8403	-
12. West Bengal	16051	-	13790		2946	-	8
13. Madhya Pradesh	73	-	879		-	-	-
TOTAL ONSHORE	117931	423	243157		26489	15474	8
OFFSHORE	233499	-	-		147752	14805	-
TOTAL	351430	423	243157		174241	30279	8

SLK: Standard Line Kilometres.

STATE-WISE ACHIEVEMENT OF DRILLING BY ONGC/OIL SINCE INCEPTION UPTO MARCH 1990.

STATE	DRILLING (000 METRES)			
	DEPARTMENTAL		CONTRACT	
	Wells	Metreage	Wells	Metreage
1	2	3	4	5
A. ONLAND :				
1. Andhra Pradesh (Including Kerala)	63	225.68	-	-
2. Assam, Andaman & Nicobar (including Tripura, Mizoram, Meghalaya, West Bengal and Nagaland)	1542+8P	5047.39	15+1P	43.98
3. Gujarat (including Kutch Maharashtra and Madhya Pradesh)	2556	4169.01	-	-
4. Bihar	4	19.55	1	4.90
5. Himachal Pradesh (including Punjab)	11	38.52	2	9.50
6. Tamil Nadu & Pondicherry	83	218.71	-	-
7. Jammu & Kashmir	4	12.02	-	-
8. Orissa	-	-	-	-
9. Uttar Pradesh	3	8.59	1	5.26
10. Rajasthan	27	53.24	10+1P	27.02
TOTAL ONLAND	4293+8P	9792.71	29+2P	91.66
B. OFFSHORE :				
1. West Coast	854	1974.65	-	-
2. East Coast (Mahanandi+NEC)	98	322.17	14	57.64
TOTAL OFFSHORE	952	2296.82	14	57.64
TOTAL (A+B)	5245+8P	12089.53	43+2P	149.30

P : Partly drilled

VII. C R U D E O I L

State wise Reserves of Crude Oil @

(Million Tonnes)

YEAR	ON SHORE				OFF SHORE	Grand Total
	Gujarat	Assam	Rajasthan	Total	Bombay High	
1	2	3	4	5	6	7
1966	62.73	90.27	-	153.00	-	153.00
1967	65.88	88.96	-	154.84	-	154.84
1968	64.92	76.08	-	141.00	-	141.00
1969	59.80	72.51	-	132.31	-	132.31
1970	56.38	71.46	-	127.84	-	127.84
1971	51.08	62.70	-	113.78	-	113.78
1972	52.28	72.90	-	125.18	-	125.18
1973	49.45	77.87	-	127.32	-	127.32
1974	48.45	76.05	-	124.50	-	124.50
1975	45.72	84.41	-	130.13	13.77	143.90
1976	45.79	81.99	-	127.78	147.68	275.46
1977	45.62	82.28	-	127.90	175.28	303.18
1978	47.49	78.50	-	125.99	221.04	347.03
1979	45.34	82.81*	-	128.15	226.29	354.44
1980	52.73	82.65*	-	135.38	230.95	366.33
1981	51.48	89.00*	-	140.48	328.29	468.77
1982	53.18	91.52*	-	144.70	325.18	469.88
1983	90.58	97.03*	-	187.61	338.70	526.31
1984	88.00	99.01*	-	187.01	323.81	510.82
1985	86.61	101.80*	-	188.41	311.10	499.51
1986	98.64	113.83*	-	212.47	345.54	558.01
1987	132.05	119.03*	-	251.08	330.35	581.43
1988	143.02	124.38*	-	267.40	371.04	638.44
1989	155.12	140.24*	-	295.36	430.86	726.22
1990	161.71	144.95*	-	306.66	450.74	757.40

@ Proved & Indicated Balance Recoverable Reserves.
* Includes crude oil reserves in Nagaland.

Note: For AOC & OIL the figures relate to Ist January of each year but in case of ONGC the data pertains to Ist October upto the year 1974 and thereafter to Ist January of each year.

COMPANY-WISE PRODUCTION OF CRUDE OIL IN INDIA
(CALENDAR YEARS)

('000'Tonnes)

YEAR	ON SHORE				OFFSHORE	GRAND TOTAL	CUMULATIVE PRODUCTION
	AOC	OIL	ONGC	TOTAL	ONGC		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Upto 1950	259	-	-	259	-	259	6598
1951	269	-	-	269	-	269	6867
1952	263	-	-	263	-	263	7130
1953	269	3	-	272	-	272	7402
1954	278	30	-	308	-	308	7710
1955	272	75	-	347	-	347	8057
1956	307	89	-	396	-	396	8453
1957	277	163	-	440	-	440	8893
1958	214	226	-	440	-	440	9333
1959	202	248	-	450	-	450	9783
1960	179	272	-	451	-	451	10234
1961	184	319	10	513	-	513	10747
1962	188	556	334	1078	-	1078	11825
1963	184	805	663	1652	-	1652	13477
1964	170	1274	768	2212	-	2212	15689
1965	158	1742	1122	3022	-	3022	18711
1966	149	2143	2355	4647	-	4647	23358
1967	134	2752	2781	5667	-	5667	29025
1968	117	2771	2965	5853	-	5853	34878
1969	112	3074	3537	6723	-	6723	41601
1970	107	3070	3632	6809	-	6809	48410
1971	98	3146	3941	7185	-	7185	55595
1972	93	3183	4097	7373	-	7373	62968
1973	84	3102	4012	7198	-	7198	70166
1974	72	3080	4338	7490	-	7490	77656
1975	68	3087	5128	8283	-	8283	85939
1976	63	3092	5276	8431	228	8659	94598
1977	58	3120	5569	8747	1438	10185	104783
1978	55	2697	5551	8303	2968	11271	116054
1979	47	2848	5537	8432	4407	12839	128893
1980	41	796	4033	4870	4529	9399	138292
1981	33(a)	2803	5083	7919	7006	14925	153127
1982		2963	5304	8267	11467	19734	172951
1983		2794	6501	8395	16753	25148	198099
1984		2776	6007	8783	19150	27933	226032
1985		2635	6580	9215	20645	29860	255892
1986		2713	7150	9863	21294	31157	287049
1987		2408	7626	10034	20108	30142	317191
1988		2439	8150	10589	20991	31580	348771
1989		2612	9445	12057	21628	33685	382456

(a) = After takeover of AOC by Govt. in Oct.1981, its production wing was merged with OIL. So the production figures shown under AOC are upto 14th October, 1981, thereafter the same have been merged with OIL.

COMPANY-WISE PRODUCTION OF CRUDE OIL IN INDIA
(FINANCIAL YEARS)

('000' Tonnes)

YEAR	ON SHORE				OFFSHORE	GRAND TOTAL	CUMULATIVE PRODUCTION SINCE INCEPTION
	AOC	OIL	ONGC	TOTAL	ONGC		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1970-71	104	3084	3634	6822	-	6822	50303
1971-72	97	3159	4003	7299	-	7299	57602
1972-73	90	3131	4100	7321	-	7321	64923
1973-74	82	3079	4028	7189	-	7189	72112
1974-75	71	3079	4534	7684	-	7684	79796
1975-76	66	3103	5279	8448	-	8448	88244
1976-77	62	3085	5345	8492	406	8898	97142
1977-78	57	3113	5519	8689	2074	10763	107905
1978-79	53	2671	5599	8323	3310	11633	119538
1979-80	40	2215	5089	7344	4422	11766	131304
1980-81	48	1243	4231	5522	4985	10507	141811
1981-82	23(e)	2995	5201	8219	7975	16194	158005
1982-83		2830	5356	8186	12877	21063	179068
1983-84		2873	5755	8628	17392	26020	205088
1984-85		2735	6119	8854	20136	28990	234078
1985-86		2654	6691	9345	20823	30168	264246
1986-87		2621	7241	9862	20618	30480	294726
1987-88		2448	7745	10193	20164	30357	325083
1988-89		2425	8503	10928	21112	32040	357123
1989-90*		2704	9667	12371	21716	34087	391210

* Provisional.

(e) = After takeover of AOC by Government in October 1981, its production wing was merged with OIL. So the production figures shown under AOC are upto 14th October 1981 thereafter the same have been merged with OIL.

STATE-WISE PRODUCTION OF CRUDE OIL IN INDIA

('000' Tonnes)

YEAR	ON SHORE					OFF SHORE	Grand Total
	Arunachal Pradesh	Tamil Nadu	Assam	Gujarat	Total	Bombay High	
1	2	3	4	5	6	7	8
CALANDER YEARS							
1970	-	-	3359	3450	6809	-	6809
1971	-	-	3542	3643	7185	-	7185
1972	-	-	3653	3720	7373	-	7373
1973	-	-	3594	3604	7198	-	7198
1974	-	-	3735	3755	7490	-	7490
1975	-	-	4189	4094	8283	-	8283
1976	-	-	4267	4164	8431	228	8659
1977	-	-	4510	4237	8747	1438	10185
1978	-	-	4076	4227	8303	2968	11271
1979	-	-	4563	3869	8432	4407	12839
1980	2	-	1056	3812	4870	4529	9399
1981	2	-	4373	3544	7919	7006	14925
1982	1	-	5124	3142	8267	11467	19734
1983	25	-	4901	3469	8395	16753	25148
1984	42	-	4939	3802	8783	19150	27933
1985	60	-	4879	4276	9215	20645	29860
1986	59	4	5270	4530	9863	21294	31157
1987	40	9	5138	4847	10034	20108	30142
1988	32	23	5309	5225	10589	20991	31580
1989	39	152	5771	6095	12057	21628	33685
FINANCIAL YEARS							
1970-71	-	-	3367	3455	6822	-	6822
1971-72	-	-	3630	3669	7299	-	7299
1972-73	-	-	3609	3712	7321	-	7321
1973-74	-	-	3589	3600	7189	-	7189
1974-75	-	-	3814	3870	7684	-	7684
1975-76	-	-	4300	4148	8448	-	8448
1976-77	-	-	4305	4187	8492	406	8898
1977-78	-	-	4534	4155	8689	2074	10763
1978-79	-	-	4085	4238	8323	3310	11633
1979-80	-	-	3578	3766	7344	4422	11766
1980-81	2	-	1712	3808	5522	4985	10507
1981-82	2	-	4795	3422	8219	7975	16194
1982-83	1	-	5000	3185	8186	12877	21063
1983-84	31	-	5009	3588	8628	17392	26020
1984-85	51	-	4893	3910	8854	20136	28990
1985-86	60	-	4966	4319	9345	20823	30168
1986-87	51	5	5239	4561	9862	20618	30480
1987-88	36	14	5154	4989	10193	20164	30357
1988-89	35	31	5457	5405	10928	21112	32040
1989-90*	38	208	5812	6313	12371	21716	34087

* Provisional.

State-wise Reserves of Natural Gas @

(Bn. Cubic Metres)

YEAR	ON SHORE				OFF SHORE	
	Gujarat	Assam	Rajasthan	Total	Bombay High	Grand Total
1	2	3	4	5	6	7
1966	23.09	40.06	-	63.15	-	63.15
1967	24.65	42.60	-	67.25	-	67.25
1968	21.80	41.54	-	63.34	-	63.24
1969	22.90	42.70	-	65.60	-	65.60
1970	19.66	42.82	-	62.48	-	62.48
1971	18.84	43.45	-	62.29	-	62.29
1972	16.88	45.25	0.38	62.51	-	62.51
1973	16.35	49.71	0.38	66.44	-	66.44
1974	16.18	51.30	0.38	67.86	-	67.86
1975	15.72	65.24	0.43	81.39	6.28	87.67
1976	16.41	61.42	0.43	78.26	106.62	184.88
1977	16.20	63.76	0.43	80.39	148.08	228.47
1978	15.66	63.62	0.43	79.71	186.15	265.86
1979	15.80	63.25*	0.43	79.58	264.64	344.22
1980	16.39	63.53*	0.43	80.95	270.96	351.91
1981	15.99	65.19*	0.43	81.61	329.04	410.65
1982	18.18	70.66*	0.43	89.27	330.62	419.83
1983	18.95	78.67*	0.43	98.05	377.21	475.26
1984	18.60	81.31*	0.54	100.54	377.80	478.25
1985	21.87	87.67*	0.54	110.08	368.55	478.63
1986	26.99	91.83*	0.54	119.36	377.69	497.05
1987	41.26	97.82*	0.74	139.82	400.99	540.81
1988	62.11	105.49*	0.78	168.38	411.09	579.47
1989	85.59	120.49*	1.00	207.08	447.47	647.55
1990	92.58	135.47*	1.04	229.09	457.36	686.45

@ Proved & Indicated Balance Recoverable Reserves.
* Includes Natural Gas Reserves in Tripura & Nagaland.

Note: For AOC & OIL the figures relate to Ist January of each year but in case of ONGC the data pertains to Ist October upto the year 1974 and thereafter to Ist January of each year.

STATE-WISE GROSS PRODUCTION OF NATURAL GAS IN INDIA

(Million Cubic Metres)

YEAR	ON SHORE				OFF SHORE	GRAND TOTAL
	Assam	Tripura/ T.Nadu	Gujarat	Total	Bombay High	
1	2	3	4	5	6	7
1970	996	-	458	1424	-	1424
1971	993	-	516	1509	-	1509
1972	1031	-	533	1564	-	1564
1973	1155	-	519	1674	-	1674
1974	1328	-	590	1918	-	1918
1975	1550	-	760	2310	-	2310
1976	1595	-	815	2410	28	2438
1977	1677	-	888	2565	161	2726
1978	1527	-	903	2430	340	2770
1979	1709	-	843	2552	532	3084
1980	621	-	868	1489	588	2077
1981	1605	-	761	2366	1120	3486
1982	1855	-	741	2596	2065	4661
1983	1903	-	760	2664@	3104	5768
1984	2027	-	758	2786	4034	6820
1985	2053	-	884	2937	4971	7908
1986	2128	4	980	3112	6350	9462
1987	2162	33	940	3135	7771	10906
1988	2190	29	1184	3403	9381	12784
1989	2193	83	1559	3835	12097	15932
			FINANCIAL YEARS			
1970-71	980	-	465	1445	-	1445
1971-72	1012	-	523	1535	-	1535
1972-73	1034	-	531	1565	-	1565
1973-74	1195	-	518	1713	-	1713
1974-75	1388	-	653	2041	-	2041
1975-76	1595	-	773	2368	-	2368
1976-77	1558	-	822	2380	48	2428
1977-78	1717	-	893	2610	229	2839
1978-79	1518	-	908	2426	386	2812
1979-80	1385	-	840	2225	542	2767
1980-81	843	-	842	1685	673	2358
1981-82	1748	-	758	2506	1345	3851
1982-83	1829	-	750	2579	2357	4936
1983-84	1954	-	748	2702	3259	5961
1984-85	2058@	-	775	2833	4408	7241
1985-86	2335@	-	919	2954	5180	8134
1986-87	2155@	22	971	3148	6705	9853
1987-88	2160@	43	1005	3208	8259	11467
1988-89	2178@	50	1258	3486	9731	13217
1989-90	2182@	106	1613	3901	13088	16989

@ = Includes one million Cubic Metres of Natural Gas production from Arunachal Pradesh in 1984-85 and 6 Million Cubic Metres of Natural gas in 1985-86 and 13 millions cubic metres in 1986-87, 1987-88 18 million cubic metres in 1988-89 and 23 million cubic metres in 1989-90.

* = Provisional.

State-wise Gross and Net Production of Natural Gas

(Mn.Cubic Metres)

PERIOD	Gross Prodn.	Re-injected	Flarred	Net Production
1	2	3	4	5
		ON - SHORE		
GUJARAT				
1970-71	465	-	155	310
1971-72	523	-	143	380
1972-73	531	-	117	414
1973-74	518	-	144	374
1974-75	653	-	121	532
1975-76	773	-	136	637
1976-77	822	-	131	691
1977-78	893	-	147	746
1978-79	908	-	164	744
1979-80	840	-	178	662
1980-81	842	-	146	696
1981-82	758	-	77	681
1982-83	750	-	55	695
1983-84	748	-	67	681
1984-85	775	-	85	690
1985-86	919	-	118	801
1986-87	971	-	184	787
1987-88	1005	-	268	737
1988-89	1258	-	356	902
1989-90	1613	-	478	1135
ASSAM				
1970-71	980	36	607	337
1971-72	1012	49	625	338
1972-73	1034	141	536	357
1973-74	1195	115	692	388
1974-75	1388	139	830	419
1975-76	1595	162	946	487
1976-77	1558	190	678	690
1977-78	1717	184	818	715
1978-79	1518	148	607	763
1979-80	1385	127	616	642
1980-81	843	67	257	519
1981-82	1748	110	768	870
1982-83	1829	91	876	862
1983-84	1954	45	1025	884
1984-85	2058	48	1074	936
1985-86	2035	66	887	1082
1986-87	2177**	63	871	1243
1987-88	2203**	54	738	1411
1988-89	2228**	84	740	1404
1989-90	2288**	96	740	1452

** :- Includes Tripura/Tamil Nadu and Arunachal Pradesh.

State-wise Gross and Net Production of Natural Gas

(Mn.Cubic Metres)

PERIOD	Gross Prodn.	Re-injected	Flarred	Net Production
1	2	3	4	5
		OFFSHORE		
1970-71	-	-	-	-
1971-72	-	-	-	-
1972-73	-	-	-	-
1973-74	-	-	-	-
1974-75	-	-	-	-
1975-76	-	-	-	-
1976-77	48	-	48	-
1977-78	229	-	226	3
1978-79	386	-	182	204
1979-80	542	-	170	372
1980-81	673	-	366	307
1981-82	1345	-	674	671
1982-83	2357	-	957	1400
1983-84	3259	-	1425	1834
1984-85	4408	-	1893	2515
1985-86	5180	-	2113	3067
1986-87	6705	-	1663	5042
1987-88	8259	-	2439	5820
1988-89	9731	-	2787	6944
1989-90	13088	-	4503	8585
		TOTAL		
1970-71	1445	36	762	647
1971-72	1535	49	768	718
1972-73	1565	141	653	771
1973-74	1713	115	836	762
1974-75	2041	139	951	951
1975-76	2368	162	1082	1124
1976-77	2428	190	857	1381
1977-78	2839	184	1191	1464
1978-79	2812	148	953	1711
1979-80	2767	127	964	1676
1980-81	2358	67	769	1522
1981-82	3851	110	1519	2222
1982-83	4936	91	1888	2957
1983-84	5961	45	2517	3399
1984-85	7241	48	3052	4141
1985-86	8134	66	3118	4950
1986-87	9853	63	2718	7072
1987-88	11467	54	3445	7968
1988-89	13217	84	3883	9250
1989-90	16989	96	5721	11172

State-wise Utilisation of Natural Gas in India

(Mn.Cubic Metres)

YEAR	ON-SHORE			OFFSHORE	GRAND
	Gujarat	Assam	Total	BOMBAY HIGH	TOTAL
1	2	3	4	5	6
1970-71	310	337	647	-	647
1971-72	380	338	718	-	718
1972-73	414	357	771	-	771
1973-74	374	388	762	-	762
1974-75	532	419	951	-	951
1975-76	637	487	1124	-	1124
1976-77	691	690	1381	-	1381
1977-78	746	715	1461	3	1464
1978-79	744	763	1507	204	1711
1979-80	662	642	1304	372	1676
1980-81	696	519	1215	307	1522
1981-82	681	870	1551	671	2222
1982-83	695	862	1557	1400	2957
1983-84	681	884	1565	1834	3399
1984-85	690	936	1626	2515	4141
1985-86	801	1082	1883	3067	4950
1986-87	787	1243	2030	5042	7072
1987-88	737	1411	2148	5820	7968
1988-89	902	1404	2306	6944	9250
1989-90*	1135	1452	2587	8585	11172

* = Provisional.

INDUSTRY-WISE OFFTAKES OF NATURAL GAS IN INDIA

(Million Cubic Metres)

YEAR	Energy Purpose						Non Energy Purpose				
	Power Generation	Industrial Fuel	Tea plantation	Domestic Fuel	Captive Use/LPG Shrinkage	Total	Fertilizer	Petro-Chemicals	Others	Total	Grand Total
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1970-71	261	116	15	-	68	460	187	-	-	187	647
1971-72	313	129	19	-	61	522	196	-	-	196	718
1972-73	339	148	20	Neg.	63	570	201	-	-	201	771
1973-74	323	157	22	Neg.	81	583	179	-	-	179	762
1974-75	354	164	29	6	80	633	318	-	-	318	951
1975-76	366	143	33	13	104	659	463	-	2	465	1124
1976-77	344	155	38	15	142	694	663	-	24	687	1381
1977-78	372	165	39	13	171	760	673	9	22	704	1464
1978-79	560	175	43	13	176	967	721	5	18	744	1711
1979-80	514	156	39	13	174	896	755	7	18	780	1676
1980-81	492	163	45	14	176	890	611	5	16	632	1522
1981-82	612	166	47	15	364	1204	991	8	19	1018	2222
1982-83	1025	185	51	14	499	1774	1155	7	21	1183	2957
1983-84	1209	230	56	16	572	2083	1283	10	23	1316	3399
1984-85	1454	250	62	18	721	2505	1603	10	23	1636	4141
1985-86	1299	223	78	21	795	2416	2500	10	24	2534	4950
1986-87*	2041	257	93	25	1295	3711	3335	-	26	3361	7072
1987-88*	2721	281	99	34	1313	4448	3490	-	30	3520	7968
1988-89*	3380	322	107	54	1502	5365	3807	-	78	3885	9250

Neg. = Negligible
* = Provisional estimated.

IX. REFINING.

Petroleum Refining Capacity in India as on 1.4 1990

(Million Tonnes Per Annum)

Refinery	Year of Commissioning	Installed Capacity as on 1.4.1990	Capacity after expansion under consideration/Implementation	likely date of Commissioning
1.	2.	3.	4.	5.
A. Refineries in Operation:				
1. IOC, Digboi	1901	0.50		
2. BPCL, Bombay	1955	6.00		
3. HPCL, Bombay	1954	3.50*		
4. HPCL, Vizag	1957	4.50		
5. IOC, Gauhati	1962	0.85		
6. IOC, Barauni	1964	3.30		
7. IOC, Koyali	1965	9.50		
8. IOC, Haldia	1974	2.75		
9. IOC, Mathura	1982	7.50		
10. CRL, Cochin	1966	4.50		
11. MRL, Madras	1969	5.60		
12. BRPL, Assam	1979	1.35		
	TOTAL:	49.85		
B. Projects under Consideration:				
1. Karnal			6.00	
2. Mangalore			3.00	
3. New Assam refinery			3.00	

*Excludes 2 MTPA of Swing Refinery capacity available at HPCL, Bombay

REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS 1961 TO 1989

('000' Tonnes)

YEAR	CRUDE THROUGHPUT			PRODUCTION		
	Public Sector	Private Sector	Total (2+3)	Public Sector	Private Sector	Total (5+6)
1.	2.	3.	4.	5.	6.	7.
			CALENDAR YEARS			
1961	-	6440	6440	-	6090	6090
1962	241	6762	7003	193	6391	6584
1963	470	7668	8138	407	7243	7650
1964	911	8021	8932	778	7650	8428
1965	1549	8205	9754	1328	7785	9113
1966	3476	8554	12030	3186	8097	11283
1967	6359	8071	14430	5814	7638	13452
1968	7707	8389	16096	7085	7838	14923
1969	9514	7981	17495	8736	7503	16239
1970	10994	7465	18459	10132	7040	17172
1971	11198	8390	19588	10293	7932	18225
1972	11838	7834	19672	10835	7363	18198
1973	11484	9034	20518	10522	8567	19089
1974	15107	5676	20783	13935	5306	19241
1975	16723	5112	21835	15602	4766	20368
1976	21163	1599	22762	19669	1519	21188
1977	23903	527	24430	22297	498	22795
1978	25096	530	25626	23372	505	23877
1979	27649	504	28153	25874	486	26360
1980	24668	407	25075	23213	384	23597
1981	29128	400	29528	27193	382	27575
1982	32107	-	32107	29984	-	29984
1983	34534	-	34534	32298	-	32298
1984	35235	-	35235	32963	-	32963
1985	41226	-	41226	38264	-	38264
1986	44940	-	44940	41877	-	41877
1987	47440	-	47440	44583	-	44583
1988	47896	-	47896	44730	-	44730
1989 (P)	51974	-	51974	48724	-	48724

(P) = Provisional

REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS 1961-62 TO 1989-90

('000' Tonnes)

YEAR	CRUDE THROUGHPUT			PRODUCTION		
	Public Sector	Private Sector	Total (2+3)	Public Sector	Private Sector	Total (5+6)
1.	2.	3.	4.	5.	6.	7.
			FINANCIAL YEARS			
1961-62	60	6524	6584	11	6184	6195
1962-63	300	6964	7264	274	6627	6901
1963-64	554	7920	8474	493	7492	7985
1964-65	1005	8005	9010	842	7636	8478
1965-66	1966	8267	10233	1733	7828	9561
1966-67	4166	8547	12713	3741	8141	11882
1967-68	6783	8022	14805	6257	7512	13769
1968-69	8088	8459	16547	7457	7932	15389
1969-70	10087	7825	17912	9250	7342	16592
1970-71	10820	7559	18379	9965	7145	17110
1971-72	11575	8467	20042	10623	8016	18639
1972-73	11565	7763	19328	10575	7255	17830
1973-74	11616	9342	20958	10647	8848	19495
1974-75	15572	5522	21094	11572	8031	19603
1975-76	17045	5238	22283	15895	4934	20829
1976-77	21694	1301	22995	20203	1229	21432
1977-78	24364	534	24898	22712	507	23219
1978-79	25450	524	25974	23692	501	24193
1979-80	27066	408	27474	25403	391	25794
1980-81	25333	503	25836	23646	477	24123
1981-82	29912	234	30146	27931	251	28182
1982-83	33156	-	33156	31073	-	31073
1983-84	35263	-	35263	32926	-	32926
1984-85	35556	-	35556	33236	-	33236
1985-86	42910	-	42910	39881	-	39881
1986-87	45699	-	45699	42761	-	42761
1987-88	47754	-	47754	44728	-	44728
1988-89	48803	-	48803	45699	-	45699
1989-90 (P)	51942	-	51942	48690	-	48690

(P) = Provisional

REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION (NET) OF POL PRODUCTS 1965-66 - 1989-90*

('000' Tonnes)

YEAR	AOC/ AOD	BSR/ BPCL	ESSO/ HPCL	CORIL/ HPC (VMU)	GUWAHATI	BARAUNI
1.	2.	3.	4.	5.	6.	7.
1965-66:						
Total Production	479	3743	2552	1053	721	613
Crude Run	488	3989	2672	1118	804	753
1970-71:						
Total Production	452	3333	2275	1085	631	1996
Crude Run	476	3541	2367	1175	686	2191
1975-76:						
Total Production	489	3438	2635	1007	762	2722
Crude Run	527	3630	2830	1081	827	2949
1980-81:						
Total Production	477	4629	2907	1208	577	432
Crude Run	503	4901	3113	1319	639	504
1982-83:						
Total Production	501	4272	2926	1004	733	2861
Crude Run	521	4485	3124	1077	802	3071
1984-85:						
Total Production	511	5230	3021	1157	712	2710
Crude Run	531	5481	3220	1249	761	2896
1985-86:						
Total Production	511	5981	4102	2438	696	2513
Crude Run	529	6389	4375	2659	766	2766
1986-87						
Total Production	530	5277	4752	3452	738	2604
Crude Run	551	5580	5011	3715	802	2860
1987-88						
Total Production	468	6178	5170	3351	770	2394
Crude Run.	547	6539	5456	3621	815	2638
1988-89						
Total Production	558	5811	5243	3514	675	2591
Crude Run	574	6132	5506	3762	762	2815
1989-90*						
Total Production	544	6728	5520	3976	801	2709
Crude Run	570	7037	5755	4280	856	2964

*Provisional.

Contd...

REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION (NET) OF POL PRODUCTS 1965-66 - 1989-90*

('000' Tonnes)

Y E A R	GUJARAT	HALDIA	MATHURA	CRL	MRL	BRPL	TOTAL
1.	2.	3.	4.	5.	6.	7.	8.
1965-66:							
Total Production	400	-	-	-	-	-	9561
Crude Run	409	-	-	-	-	-	10233
1970-71:							
Total Production	3208	-	-	2346	1784	-	17110
Crude Run	3463	-	-	2498	1982	-	18379
1975-76:							
Total Production	3854	1295	-	2187	2435	-	20829
Crude Run	4107	1348	-	2294	2690	-	22283
1980-81:							
Total Production	6629	2056	-	2795	2376	37	24123
Crude Run	6974	2308	-	2912	2611	52	25836
1982-83:							
Total Production	6667	2301	3610	3048	2635	515	31073
Crude Run	7089	2503	3844	3187	2857	596	33156
1984-85:							
Total Production	7290	2101	5909	826	3139	630	33236
Crude Run	7777	2365	6239	872	3413	752	35556
1985-86:							
Total Production	7305	2579	5734	2560	4723	739	39881
Crude Run	7830	2822	6075	2749	5057	893	42910
1986-87							
Total Production	7384	2390	6006	3954	4842	847	42776
Crude Run	7835	2623	6353	4166	5192	1011	45699
1987-88							
Total Production	7936	2527	6202	3946	4751	941	44634
Crude Run	8444	2808	6535	4111	5131	1109	47754
1988-89							
Total Production	8071	2405	6162	4545	5155	969	45699
Crude Run	8656	2636	6557	4761	5476	1166	48803
1989-90*							
Total Production	8544	11060	6814	4344	5096	1005	48690
Crude Run	9109	2824	7208	4616	5510	1214	51942

* Provisional.

TRENDS IN DOMESTIC PRODUCTION OF PETROLEUM PRODUCTS DURING THE PERIOD 1975-76 TO 1989-90.

(Qty. '000'Tonnes)

Products	1975-76	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.Light Distillates	3630	4101	5138	5313	6134	6315	8253	9069	9245	9451	10021
of which :											
LPG*	331	366	410	406	514	596	867	995	1026	1034	1179
Mogas	1275	1519	1614	1797	1937	2144	2306	2515	2662	2822	3328
Naphtha	1910	2115	3004	2986	3578	3470	4955	5437	5462	5378	5227
2. Middle Distillates	10769	12115	14134	15625	16873	17226	21613	23324	24563	25362	26867
of which											
Kerosene	2439	2396	2907	3393	3528	3364	4030	4912	5104	5201	5700
ATF	925	1001	1009	1137	1195	1297	1519	1553	1695	1753	1575
HSD	6285	7371	9042	9761	10862	11086	14624	15450	16296	16656	17737
LDO	946	1108	949	1121	1081	1253	1177	1172	1259	1468	1540
3. Heavy Ends	6430	7907	8910	10135	9919	9694	10015	10368	10870	10886	11802
of which											
F.O.	3595	4041	4015	4829	4588	4095	3791	3865	4563	4243	4543
LSHS/HHS	1488	2079	2893	3135	3412	3791	4164	4146	3903	4614	4409
Total Fuel Oils	5083	6120	6908	7964	8000	7886	7955	8011	8466	8857	8952
Lube Oils	342	426	407	434	470	414	501	491	478	497	547
Petroleum Coke	160	86	141	149	136	181	192	264	257	275	275
Bitumen	697	1082	1298	1397	1069	944	1107	1224	1370	1548	1671
TOTAL PRODUCTION :	20829	24123	28182	31073	32926	33236	39881	42761	44728	45699	48690
Crude Throughput	22283	25836	30146	33156	35263	35556	42910	45699	47754	48803	51942
LPG Production from											
Natural Gas	-	-	73	169	223	277	363	494	558	724	768
NGL PRODN.	-	-	-	25	50	58	83	186	266	386	619

(P) - Provisional

* - Excludes LPG production from Natural Gas.

PRODUCTION OF PETROLEUM PRODUCTS-1982 TO 1989

('000' Tonnes)

PRODUCT	PRODUCTION						% Variation	
	1982	1984	1986	1987	1988	1989	1988 1987	1989 1988
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			a) From Crude Oil:					
1. Light Distillates:	5112	6226	8859	9318	9285	10086	-0.4	+ 8.6
of which								
L.P. Gas	377	583	963	1021	1010	1163	-1.1	+15.1
Naphtha	2871	3479	5300	5574	5361	5422	-3.8	+ 1.1
Mogas	1750	2062	2464	2789	2700	3242	-3.2	+20.1
SBPS/Hexane	49	28	40	48	74	85	+54.2	+14.9
2. Middle Distillates:	15013	17003	22825	24332	24950	26949	+2.5	+ 8.0
of which								
ATF/Jet A-1	1092	1332	1510	1647	1756	1654	+6.6	- 5.8
Kerosene	3253	3304	4735	5113	5116	5507	+0.1	+ 7.6
M.T.O.	90	105	104	110	110	130	-	+18.2
H.S.D.	9365	10954	15166	16106	16399	17979	+1.8	+ 9.6
L.D.O.	1104	1197	1176	1242	1424	1512	+14.7	+ 6.2
J.B.O.	61	50	70	63	61	77	-3.2	+26.2
3. Heavy Ends:	9859	9734	10193	10933	10494	11689	-4.0	+11.4
of which								
F.O.	4801	4296	3738	4659	4155	4491	-10.8	+ 8.1
LSHS/HHS	3001	3618	4190	3957	4374	4395	-6.1	+ 0.5
Total (Fuel Oils)	7802	7914	7928	8616	8529	8886	-1.0	+ 4.2
Lube Oils	404	455	478	507	577	556	+13.8	- 3.6
Bitumen	1300	919	1247	1351	1556	1595	+15.2	+ 2.5
Pet. Coke*	159	174	249	267	272	277	+1.9	+ 1.8
Waxes	58	66	84	75	85	95	+13.3	+11.8
4. Total Production	29984	32963	41877	44583	44730	48724	+0.3	+ 8.9
5. Crude Run	32107	35265	44940	47445	48803	51974	+2.9	+ 6.5
			(b) From Natural Gas:					
6. L.P.G.	147	261	465	542	706	761	+30.3	+ 7.8

* Includes Calcined pet. Coke

PATTERN OF REFINERY PRODUCTION

(Percentages)

PRODUCTS	1982	1984	1986	1987	1988	1989(P)
Light Distillates @	15.9	17.7	19.7	19.6	19.0	19.4
Middle Distillates	46.8	48.3	50.8	51.3	51.1	51.8
Heavy Fuel Oils	24.3	22.5	17.6	18.2	21.5	22.5
Bitumen	4.0	2.6	2.8	2.8	3.2	3.1
Lubes	1.3	1.3	1.1	1.1	1.2	1.1
Others	1.1	1.1	1.2	1.0	1.0	1.0
Total Production	93.4	93.6	93.2	94.0	91.7	93.8
RBF & Losses/Inventories	6.3	6.4	6.8	6.0	8.3	6.2
Crude Run	100	100	100	100	100	100

(@) = Includes gases.
(P) = Provisional

PRODUCTION OF PETROLEUM PRODUCTS-1982-83 TO 1989-90

('000' Tonnes)

PRODUCT	PRODUCTION						% Variation	
	1982-83	1985-86	1986-87	1987-88	1988-89	1989-90	1988-89 1987-88	1989-90 1988-89
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			a) From Crude Oil:					
1. Light Distillates:	5313	8253	9069	9245	9451	10021	+ 2.2	+ 6.0
of which								
L.P. Gas	406	867	995	1026	1034	1179	+ 1.0	+14.0
Naphtha	2986	4955	5437	5462	5378	5227	- 1.5	- 2.8
Mogas	1797	2306	2515	2662	2822	3328	+ 6.0	+17.9
SBPS/Hexane	54	31	32	74	72	96	- 2.7	+33.2
2. Middle Distillates:	15625	21613	23324	24563	25362	26867	+ 3.3	+ 5.9
of which								
ATF/Jet A-1	1137	1519	1553	1695	1753	1575	+ 3.4	-10.2
Kerosene	3393	4030	4912	5104	5201	5700	+ 1.9	+ 9.6
M.T.O.	98	106	105	109	115	128	+ 5.5	+11.3
H.S.D.	9761	14624	15450	16296	16656	17737	+ 2.2	+ 6.5
L.D.O.	1121	1177	1172	1259	1468	1540	+16.6	+ 4.9
J.B.O.	60	91	67	63	72	74	+14.3	+ 2.8
3. Heavy Ends:	10135	10015	10368	10870	10886	11802	+ 0.2	+ 8.4
of which								
F.O.	4829	3791	3865	4563	4243	4543	- 7.0	+ 7.1
LSHS/HHS	3135	4164	4146	3903	3928	4409	+ 0.6	+12.3
Total	7964	7955	8011	8466	8171	8952	- 3.5	+ 9.6
Lube Oils	434	501	491	478	497	547	+ 4.0	+10.1
Bitumen	1397	1107	1224	1370	1548	1671	+13.0	+ 8.0
Pet. Coke*	149	192	264	257	275	275	+ 7.0	--
Waxes	58	81	79	75	88	95	+17.3	+ 8.0
4. Total Prodn:	31073	39881	42761	44728	45699	48690	+ 2.2	+ 6.6
5. Crude Run	33156	42910	45699	47754	48803	51942	+ 2.2	+ 6.4
			(b) From Natural Gas:					
6. L.P.G.	169	363	494	558	724	768	+29.8	+ 6.1

(P) Provisional. * Includes Calcined pet. Coke

PATTERN OF REFINERY PRODUCTION

(Percentages)

PRODUCTS	1982-83	1985-86	1986-87	1987-88	1988-89	1989-90(P)
Light Distillates @	16.0	19.2	19.9	19.4	19.4	19.3
Middle Distillates	47.1	50.4	51.0	51.4	52.0	51.7
Heavy Fuel Oils	24.0	18.5	17.5	17.7	16.7	17.2
Bitumen	4.2	2.6	2.7	2.9	3.2	3.2
Lubes	1.3	1.2	1.1	1.0	1.0	1.1
Others	1.1	1.0	1.4	1.0	1.0	1.0
Total Production	93.7	92.9	93.6	93.5	93.6	93.7
RBF & Losses/Inventories	6.3	7.1	6.4	6.5	6.4	6.3
Crude Run	100	100	100	100	100	100

@ = Includes gases. (P) = Provisional.

X. CONSUMPTION / SALES

TOTAL SALES/CONSUMPTION OF PETROLEUM PRODUCTS

(Incl. Sales to Nepal*, Sikkim, Bhutan and Bunkers/ International Airlines)

(Qty.'000' Tonnes)

Year	Total Consumption	% age Growth	Year	Total Consumption	% age Growth
1.	2.	3.	4.	5.	6.
1948	2657	- 2.9	1948-49	2774e	+ 2.1
1949	3125	+17.6	1949-50	3174e	+14.4
1950	3319	+ 6.2	1950-51	3485e	+ 9.8
1951	3888	+17.1	1951-52	3851e	+10.5
1952	3741	- 3.8	1952-53	3785e	- 1.7
1953	3916	+ 4.7	1953-54	3948e	+ 4.3
1954	4089	+ 4.4	1954-55	4270e	+ 8.2
1955	4817	+17.8	1955-56	4920e	+15.2
1956	5229	+ 8.6	1956-57	5376e	+ 9.3
1957	5819	+11.3	1957-58	5894e	+ 9.6
1958	6117	+ 5.1	1958-59	6291e	+ 6.7
1959	6812	+11.4	1959-60	7100e	+12.9
1960	7964	+16.9	1960-61	8285	+16.7
1961	8570	+ 7.6	1961-62	8724	+ 5.3
1962	9536	+11.3	1962-63	9832	+12.7
1963	10387	+ 8.9	1963-64	10671	+18.3
1964	11478	+10.5	1964-65	11700	+ 9.7
1965	12356	+ 7.6	1965-66	12437	+ 6.3
1966	12990	+ 5.1	1966-67	13348	+ 7.3
1967	14133	+ 8.8	1967-68	14397	+ 7.9
1968	15871	+12.3	1968-69	16305	+13.3
1969	17371	+ 9.3	1969-70	17797	+ 9.2
1970	18816	+ 8.3	1970-71	19135	+ 7.5
1971	20706	-10.0	1971-72	21299	+11.3
1972	22675	+ 9.5	1972-73	22978	+11.3
1973	23726	+ 4.6	1973-74	23574	+ 2.6
1974	23023	- 3.0	1974-75	23302	+ 1.2
1975	23541	+ 2.2	1975-76	23673	+ 1.6
1976	24897	+ 5.8	1976-77	25400	+ 7.3
1977	26570	+ 6.7	1977-78	26990	+ 6.3
1978	28894	+ 8.7	1978-79	29719	+10.1
1979	31306	+ 8.3	1979-80	31323	+ 5.4
1980	31633	+ 1.0	1980-81	32261	+ 3.0
1981	34037	+ 7.6	1981-82	34107	+ 5.7
1982	35403	+ 4.0	1982-83	36395	+ 6.7
1983	37223	+ 5.1	1983-84	37776	+ 3.8
1984	39934	+ 7.3	1984-85	40828	+ 8.1
1985	42973	+ 7.6	1985-86	43363	+ 6.2
1986	45483	+ 5.8	1986-87	46274	+ 6.7
1987	48048	+ 5.9	1987-88	48938	+ 5.8
1988	51308	+ 6.8	1988-89	52882	+ 8.1
1989(P)	55801	+ 8.8	1989-90(P)	56779	+ 7.4

NOTE:- i) Includes Refinery fuel from 1960/1960-61 onwards.
ii) Prior to that Refinery fuel consumption is not available.
* = Excludes sales to Nepal from 1975/1975-76 onwards.
(P) Provisional. e = Estimated.

TRENDS IN SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE PERIOD 1970-71 TO 1989-90.

('000' Tonnes)

PRODUCT	1970 -71	1975 -76	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	% age share of the Total
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. LIGHT DISTILLATES:	2697	3596	4388	5187	5420	5600	6318	6776	7412	7547	8619	9412	16.6
of which: LPG	176	336	405	492	601	746	953	1241	1497	1686	1962	2268	4.0
Mogas	1453	1275	1522	1599	1722	1891	2084	2275	2505	2810	3052	3491	6.1
Naphtha	904	1836	2325	2963	2958	2804	3125	3106	3249	2852	3364	3350	5.9
2. MIDDLE DISTILATES:	9040	11653	17056	17919	19660	20651	22429	23948	25656	28005	29955	32484	57.2
of which: Kerosene	3283	3104	4228	4693	5214	5524	5959	6229	6645	7231	7731	8239	14.5
ATF/Jet A-1	689	897	1125	1128	1145	1208	1336	1453	1603	1654	1713	1775	3.1
HSD	3837	6595	10345	10832	12013	12600	13696	14886	16009	17657	18795	20706	36.5
LDO	1092	878	1122	1036	1067	1097	1198	1123	1156	1245	1437	1486	2.6
3. HEAVY ENDS :	6175	7198	9452	9417	9577	9590	10048	10148	10594	10864	11518	12199	21.5
FO/TDO	3513	4279	5406	4306	4208	4207	4256	3806	3793	4191	4605	4490	7.9
LSHS	962	1381	2065	2878	3093	3351	3688	4094	4254	3953	3851	4330	7.6
HHS	189	121	2										
Total Fuel Oils	4664	5781	7473	7184	7301	7558	7944	7900	8047	8144	8456	8820	15.5
Lube Oils	523	425	570	567	577	590	634	658	721	756	811	888	1.6
Greases	22	16	23	25	28	27	30	42	34	35	36	38	0.1
Lubes & Greases(Total)	545	441	593	592	605	617	664	700	755	791	847	926	1.6
Bitumens	777	690	1064	1292	1379	1050	935	1126	1309	1379	1498	1695	3.0
Petroleum Coke	107	151	137	174	103	114	234	163	208	246	316	383	0.7
Other Misc.	82	135	185	175	189	251	271	259	275	304	401	375	0.7
Total (1+2+3)	17912	22447	30896	32523	34657	35841	38795	40872	43662	46416	50092	54095	95.3
Refinery Fuel	1223	1226	1365	1584	1738	1935	2033	2491	2612	2522	2790	2684	4.7
GRAND TOTAL	19135	23673	32261	34107	36395	37776	40828	43363	46274	48938	52882	56779	100.0

P = Provisional.

PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1985 TO 1989.

(Qty.'000' Tonnes)

PRODUCT	1985	1986	1987	1988	1989	% age change 1989/1988
1.	2.	3.	4.	5.	6.	7.
1.Light Distillates:	6683	7213	7415	8286	9259	11.7
L.P.Gas	1175	1431	1629	1887	2181	15.6
Naphtha	3107	3194	2875	3258	3421	5.0
Mogas	2247	2428	2735	2974	3370	13.3
SBP/Haxane	54	62	65	75	105	40.0
Others	100	98	111	92	181	97.6
2.Middle Distillates:	21855	23714	25208	27318	31926	9.3
Kerosene	6168	6522	7088	7595	8089	6.5
ATF/Jet A-1	1431	1588	1627	1691	1752	3.6
HSD	14713	15703	17165	18325	20329	10.9
LDO/MDO	1145	1149	1220	1379	1491	8.1
JBO	81	75	62	65	74	13.8
MTO	100	101	103	107	118	10.3
Others	76	70	53	54	73	35.2
3.Heavy ends:	10186	10456	10811	11352	11938	5.2
Fuel Oils (total)	7955	8016	8150	8360	8700	4.1
F.O./TDO	3933	3761	4024	4696	4353	(-)7.3
LSHS/HHS	4022	4255	4126	3664	4347	18.6
Lubes & Greases	696	736	794	832	884	6.3
Bitumen/Asphalt	1103	1216	1357	1512	1597	5.6
Pet.Coke	180	199	212	280	369	31.8
Wax	86	78	84	7.7	110	31.0
Others	177	203	222	284	278	(-)2.1
Total (1+2+3)	40583	42877	45544	48854	53123	8.7
Refinery Fuel@	2390	2606	2504	2454	2678	9.1
GRAND TOTAL:	42973	45483	48048	51308	55801	8.8

@ = RBF, Lube Refinery Fuel & TPs Fuel.
P = Provisional.

PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1985-86 TO 1989-90

(Qty.'000' Tonnes)

PRODUCT	1985-86	1986-87	1987-88	1988-89	1989-90	% age Change 1989-90/ 1988-89
1.	2.	3.	4.	5.	6.	7.
1.Light Distillates:	6776	7412	7547	8619	9412	9.2
L.P.Gas	1241	1497	1686	1962	2268	15.6
Naphtha	3106	3249	2852	3364	3350	-0.4
Mogas	2275	2505	2810	3052	3491	14.4
SBP/Haxane	54	64	66	86	112	30.2
Others	100	97	128	155	191	23.2
2.Middle Distillates:	23948	25656	28005	29955	32484	8.4
Kerosene	6229	6645	7231	7731	8239	6.6
ATF/Jet A-1	1453	1603	1654	1713	1775	3.6
HSD	14886	16009	17657	18795	20706	10.2
LDO/MDO	1123	1156	1245	1437	1486	3.4
JBO	85	70	62	72	77	6.9
MTO	100	102	104	110	118	7.3
Others	72	71	52	97	83	(-)14.4
3.Heavy Ends:	10148	10594	10864	11518	12199	5.9
Fuel Oils (total)	7900	8047	8144	8456	8820	4.3
F.O./TDO	3806	3793	4191	4605	4490	(-)2.5
LSHS/HHS	4094	4254	3953	3851	4330	12.4
Lubes & Greases	700	755	791	847	926	(+)9.3
Bitumen/Asphalt	1126	1309	1379	1498	1695	13.2
Pet.Coke	163	208	246	316	383	21.2
Wax	76	82	81	106	116	9.4
Others	183	193	223	295	259	(-)12.2
Total (1+2+3)	40872	43662	46416	50092	54095	8.0
Refinery Fuel@	2491	2612	2522	2790	2684	(-)3.8
GRAND TOTAL:	43363	46274	48938	52882	56779	7.4

@ = RBF, Lube Refinery Fuel & TPs Fuel.
P = Provisional.

Seasonal Indices of the Sales/Consumption of Major Petroleum Products - in India.

(Base : 1980-81)

MONTH	M.S.	A.T.F.	KEROSENE	H.S.D.	L.D.O.	BITUMEN	ALL PRODUCTS
1.	2.	3.	4.	5.	6.	7.	8.
April	8.33	8.17	7.92	8.83	7.83	8.25	7.09
May	9,00	8.42	7.92	9.00	7.75	8.25	8.34
June	8.41	8.00	7.92	8.33	7.25	7.42	8.17
1st Quarter Total	25.74	24.59	23.76	26.16	22.83	23.92	23.60
July	8.17	8.00	8.16	8.00	7.42	7.33	8.17
August	8.00	8.16	8.08	7.25	7.42	7.58	8.00
September	7.92	8.25	8.25	7.33	8.41	7.00	8.00
2nd Quarter Total	24.09	24.41	24.49	22.58	23.25	21.91	24.17
October	8.33	8.42	8.42	8.08	8.75	7.59	8.34
November	8.17	8.67	8.83	8.50	9.33	8.00	8.59
December	8.67	8.33	8.92	8.92	10.00	9.33	9.09
3rd Quarter Total	25.17	25.42	26.17	25.50	28.08	24.92	26.02
January	8.33	8.67	8.92	8.67	9.17	9.33	8.84
February	8.17	8.08	8.50	8.17	8.00	8.83	8.42
March	8.50	8.83	8.16	8.92	8.67	11.09	8.95
4th Quarter Total	25.00	25.58	25.58	25.76	25.84	29.25	26.21
T O T A L :	100.00	100.00	100.00	100.00	100.00	100.00	100.00

NOTE : (i) Based on Sales/Consumption data from 1980-81 to 1987-88 (Prov.)

(ii) Moving Average Method.

SALES/CONSUMPTION OF PETROLEUM PRODUCT AND MARKET PARTICIPATION OF OIL COMPANIES IN INDIA. 1965-66 TO 1989-90.

(Qty.'000' Tonnes)

Y E A R		I.O.C.	B.Shell/ BPCL	Esso/ HPCL	Caltex/@ HPCL(VMU)	IBP	Others	T O T A L
1.		2.	3.	4.	5.	6.	7.	8.
1960-61	S/C	38	3722	2302	1270	155	498	7985
(E)	%	0.5	46.6	28.8	15.9	2.0	6.2	100
1965-66	S/C	2812	4270	2816	1390	168	461	11917
(E)	%	23.6	35.8	23.6	11.7	1.4	3.9	100
1970-71	S/C	9212	4219	2538	1279	291	373	17912
	%	51.4	23.6	14.2	7.1	1.6	2.1	100
1971-72	S/C	10959	4153	2717	1316	404	522	20071
	%	54.6	20.7	13.5	6.6	2.0	2.6	100
1972-73	S/C	12788	4085	2620	1185	474	564	21716
	%	58.9	18.8	12.1	5.4	2.2	2.6	100
1973-74	S/C	13745	3985	2392	1095	536	593	22346
	%	61.5	17.8	10.7	4.9	2.4	2.7	100
1974-75	S/C	14363	3184	2510	972	620	456	22105
	%	65.0	14.4	11.4	4.4	2.8	2.0	100
1975-76	S/C	14525	3151	2647	931	659	534	22447
	%	64.7	14.0	11.8	4.2	2.9	2.4	100
1976-77	S/C	15321	3775	2809	974	702	520	24101
	%	63.6	15.7	11.6	4.0	2.9	2.2	100
1977-78	S/C	15721	4217	3083	1146	826	546	25539
	%	61.5	16.5	12.1	4.5	3.2	2.2	100
1978-79	S/C	17223	4601	3488	1348	938	643	28241
	%	61.0	16.3	12.3	4.8	3.3	2.3	100
1979-80	S/C	18136	4968	3768	1393	1012	1618	29883
	%	60.7	16.6	12.6	4.7	3.4	2.0	100
1980-81	S/C	18494	5297	5596		1034	475	30896
	%	59.9	17.1	18.1		3.3	1.6	100
1981-82	S/C	20155	5317	5687		1107	257	32523
	%	62.0	16.3	17.5		3.4	0.8	100
1982-83	S/C	21317	5760	6079		1252	249	34657
	%	61.5	16.6	17.6		3.6	0.7	100
1983-84	S/C	21629	6211	6491		1326	184	35841
	%	60.4	17.3	18.1		3.7	0.5	100
1984-85	S/C	22977	7069	6995		1469	285	38795
	%	59.2	18.2	18.0		3.8	0.8	100
1985-86	S/C	23840	7580	7638		1552	262	40872
	%	58.3	18.6	18.7		3.8	0.6	100
1986-87	S/C	25820	7935	7944		1669	294	43662
	%	59.1	18.2	18.2		3.8	0.7	100
1987-88	S/C	27083	8558	8720		1880	175	46416
	%	58.3	18.4	18.8		4.1	0.4	100
1988-89	S/C	28986	9330	9445		1971	360	50092
	%	57.9	18.6	18.9		3.9	0.7	100
1989-90(P)	S/C	30997	10183	10346		2206	363	54095
	%	57.3	18.8	19.1		4.1	0.7	100

S/C = Sales / Consumption E = Estimated
P = Provisional. @ = Included under ESSO/HPCL from 1980-81 onwards.

Deliveries* made to International/Coastal Bunkers during the years 1975-76 TO 1989-90

(Qty.'000' Tonnes)

ITEMS	1975 -76	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Shipping International Bunkers:											
F.O.	137.2	148.7	67.1	85.0	104.4	154.9	64.3	110.2	165.1	101.9	143.2
H.S.D.	11.4	15.4	16.8	14.5	17.0	12.4	10.1	6.4	12.0	7.2	8.6
L.D.O.	39.5	50.4	52.3	41.7	42.3	36.6	31.5	33.7	44.7	38.6	36.0
TOTAL	188.1	214.5	136.2	141.2	199.7	203.9	105.9	150.3	221.8	147.7	187.8
Coastal Bunkers:											
F.O.	178.3	128.9	149.6	172.2	142.0	143.2	167.7	197.6	200.0	200.0	208.4
H.S.D.	25.9	42.0	61.4	81.0	86.3	86.7	98.3	134.0	140.0	134.3	120.7
L.D.O.	28.1	32.4	36.8	47.8	47.1	49.0	39.9	35.6	32.6	38.3	38.0
TOTAL	232.3	204.3	247.8	301.0	275.4	278.9	305.9	367.2	372.6	372.6	367.1
Total Bunkers:											
F.O.	315.5	277.6	216.7	257.2	282.4	298.1	232.0	307.8	365.1	301.9	351.6
H.S.D.	37.3	58.4	78.2	95.5	103.3	99.1	108.4	140.4	152.0	141.5	129.3
L.D.O.	67.6	82.8	89.1	89.5	89.4	85.6	71.4	69.3	77.3	76.9	74.0
TOTAL	420.4	418.8	384.0	442.2	475.1	482.8	411.8	517.5	594.4	520.3	554.9

* = Excluding Sales to foreign bunkers on KNPC account by IOC.

STATE-WISE CONSUMPTION OF MAJOR PETROLEUM PRODUCTS: 1989-90(Prov.)
(Including International Bunkers)

('000' Tonnes)

State/Territory	NAPTHA	LPG	MS All Grades	SKO	ATF	HSD	LDO	FO	LSHS/ HHS	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12
A. STATES											
1. Andhra Pradesh	65	177	208	545	47	1676	36	230	59	183	3226
2. Assam	25	34	61	257	56	328	6	97	46	138	1048
3. Bihar	73	54	135	471	10	1196	209	243	179	241	2816
4. Goa	219	12	21	29	24	101	4	27	76	96	609
5. Gujarat	592	200	280	752	33	1296	263	318	1484	320	5538
6. Jammu & Kashmir	--	15	29	77	8	136	7	2	1	27	302
7. Kerala	173	76	149	258	30	683	10	148	118	151	1796
8. Madhya Pradesh	2	118	162	379	30	1211	24	265	127	184	2502
9. Tamil Nadu	466	201	232	647	66	2069	58	596	268	303	4906
10. Maharashtra	543	443	584	1460	659	517	330	895	989	584	9004
11. Karnataka	111	103	215	432	55	1000	20	216	75	120	2347
12. Orissa	105	16	52	158	10	391	16	184	76	77	1085
13. Punjab	16	93	216	326	58	1261	24	250	175	88	2507
14. Rajasthan	170	71	121	264	41	1144	18	268	221	134	2452
15. Uttar Pradesh	681	231	325	909	65	2543	134	155	131	394	5568
16. West Bengal	41	116	149	734	112	1233	194	306	68	448	3401
17. Haryana	6	65	99	150	20	787	48	160	182	82	1599
18. Himachal Pradesh	--	10	18	33	--	108	3	3	2	9	186
19. Manipur	--	4	11	22	1	23	--	1	--	5	67
20. Meghalaya	--	3	14	17	--	57	--	--	--	6	97
21. Nagaland	--	2	14	10	--	19	--	--	--	9	54
22. Sikkim	--	1	3	4	--	3	--	1	--	1	13
23. Tripura	--	2	7	22	2	31	--	--	--	13	77
24. Arunachal Pradesh	--	1	7	11	2	31	--	--	--	5	57
25. Mizoram	--	2	7	9	--	17	--	--	--	5	40
TOTAL (A)	3288	2055	3119	7976	1329	19861	1404	4365	4277	3623	51297
B. UNION TERRITORIES											
1. Andaman & Nikobar	--	--	2	4	3	38	1	2	--	3	53
2. Chandigarh	--	14	25	18	24	35	2	4	3	63	188
3. Delhi	59	190	330	213	416	718	73	111	50	131	2291
4. Dadar & Nagar Haveli	--	--	2	5	--	8	3	--	--	1	19
5. Daman & Diu	--	1	1	4	--	4	--	1	--	1	12
6. Lakshadweep	--	--	--	--	--	3	--	--	--	--	3
7. Pondicherry	--	8	9	14	--	72	3	4	--	3	113
TOTAL (B)	59	213	369	258	443	878	82	122	53	204	2679
C. OUTSIDE TERRITORIES											
Bhutan	--	1	3	4	1	13	--	2	--	6	30
D. ADJUSTMENT/(+/-)	+3	--	--	+1	+2	-46	--	+1	--	+127	+89
GRAND TOTAL (A+B+C)	3350	2268	3491	8239	1775	20706	1486	4490	4330	3960	54095

Figures inflated to the extent of the magnitude of lubricating oils sales by the PVT Companies.

Estimated State-wise per capita Sales/Consumption of POL Product (Kgs.)

State Territory	1980-81	1985-86	1986-87	1987 88	1988-89	1989-90
A. STATES						
Andhra Pradesh	33.3	38.8	40.0	42.4	46.5	51.1
Assam	26.6	33.7	35.4	37.7	40.5	42.9
Bihar	20.5	26.1	28.5	30.0	33.0	33.2
Gujarat	114.6	127.8	133.0	134.6	139.1	137.4
Haryana	64.7	80.0	88.2	94.4	86.5	99.3
Himachal Pradesh	19.9	24.7	27.0	31.5	35.0	37.1
Jammu & Kashmir	27.7	33.1	37.3	41.1	42.1	41.4
Karnataka	34.1	42.6	47.0	47.5	51.4	52.7
Kerala	44.9	48.5	52.0	54.9	60.3	60.6
Madhya Pradesh	21.6	31.7	32.8	35.0	38.3	39.7
Maharashtra	92.4	101.2	101.5	106.3	117.4	121.4
Manipur	29.2	30.6	32.7	35.7	41.7	38.1
Meghalaya	20.2	40.9	42.4	43.5	53.4	57.4
Nagaland	28.4	40.4	40.4	44.1	53.9	49.1
Orissa	20.5	26.5	27.5	30.4	33.2	35.1
Punjab	84.0	96.5	113.8	126.8	115.5	128.3
Rajasthan	31.8	39.4	42.1	43.2	55.9	56.4
Sikkim	36.7	38.9	33.3	26.2	38.1	30.2
Tamil Nadu	66.8	72.8	74.7	77.1	85.2	88.2
Tripura	13.1	18.8	20.6	23.5	27.2	30.4
Uttar Pradesh	23.1	31.8	34.8	35.9	39.7	41.7
West Bengal	39.8	45.1	45.9	47.6	51.2	52.5
B. OTHER AREAS						
Chandigarh	209.3	226.9	246.8	250.8	275.4	261.1
Delhi	187.6	214.9	216.6	229.9	236.0	257.1
Goa. (incl. Daman & Diu Dadra & Ngr. Haveli)	290.6	368.0	393.4	400.7	719.7	438.4
Others	52.0	69.5	79.1	83.5	92.9	114.5
TOTAL ALL-INDIA @	48.2	55.9	59.7	62.0	63.7	69.1

Estimated per capita consumption of selected petroleum products - 1980-81 to 1989-90 (incl. Bunkers).

PRODUCT	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90
Naphtha	3.5	4.2	4.2	3.6	4.3	4.1
M.S.	2.3	3.0	3.2	3.6	3.9	4.2
SKO	6.3	8.3	8.6	9.1	9.8	10.0
HSDO	15.5	19.7	20.6	22.3	23.8	25.2
LDO	1.7	1.5	1.5	1.6	1.8	1.8
F.O. (Regular)	8.1	5.0	4.9	5.3	5.8	5.5
LSHS/HHS	3.1	5.3	5.5	5.0	4.9	5.3
TOTAL ALL-INDIA @ SALES CONSUMPTION	48.2	57.3	59.3	62.0	63.7	69.1

Note: i) Based on Expert Committee's population projections as on Ist March each year and projections on 1971 and 1981 Census basis.

ii) Includes Mogas, Kerosene, ATF, HSDO, LDO, Fuel Oils, LPG, Naphthaand Bitumen in 1979-80 and all products except (lubricants) in 1980-81 to 1982-83 but incl. lubricants in 1983-84 to 1987-88.

@ = All India actual consumption of all products incl. Ref. Fuel & International Bunkers.

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF LP GAS NAPATHA & HSDO DURING 1985-86 To 1989-90

(Qty.'000' Tonnes)

SECTOR	1985-86 Consum-ption	1985-86 % to Total	1987-88 Consum-ption	1987-88 % to Total	1988-89 Consum-ption	1988-89 % to Total	1989-90(P) Consum-ption	1989-90(P) % to total
1.	2.	3.	4.	5.	6.	7.	8.	9.
			L. P. GAS:					
1. Domestic	1100	88.6	1415	83.9	1592	82.2	1985	87.5
2. Commercial/Industry	140	11.3	243	14.4	326	16.6	272	12.0
3. Others	1	0.1	28	1.7	44	2.2	11	0.5
TOTAL :	1241	100.0	1686	100.0	1962	100	2268	100.0
			N A P H T H A.					
1. Fertilizers	2360	76.0	2064	72.4	2395	71.2	2298	68.6
2. Petrochemicals	718	23.1	754	26.4	902	26.8	982	29.3
3. Others	28	0.9	34	1.2	67	2.0	70	2.1
TOTAL :	3106	100.0	2852	100.0	3364	100.0	3350	100.0

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF HSDO, LDO FO & LSHS : 1985-86 to 1989-90.

(Qty.'000' Tonnes)

SECTOR	1985-86 Consum-ption	1985-86 % to Total	1987-88 Consum-ption	1987-88 % to Total	1988-89 Consum-ption	1988-89 % to Total	1989-90(P) Consum-ption	1989-90(P) % to total
1.	2.	3.	4.	5.	6.	7.	8.	9.
			H S D O					
1. Transport:								
i) Railways	1217	8.2	1375	7.8	1447	7.7	1491	7.2
ii) Water ways:								
(a) Coastal & Inland Bunkers	98	0.6	140	0.8	132	0.7	145	0.7
(b) International Bunkers	10	0.1	12	0.1	19	0.1	21	0.1
iii) Other transport (incl.Agr.retail trade)	11555	77.6	13833	78.3	15224	81.0	16689	80.6
Sub-TOTAL:1	12880	86.5	15360	87.0	16822	89.5	18346	88.6
II. Plantation/Food (Incl.processing)	149	1.0	177	1.0	94	0.5	207	1.0
III. Power Generation (Utilities)	160	1.1	209	1.2	132	0.7	124	0.6
IV. Industry								
i) Iron & Steel	63	0.4	57	0.3	56	0.3	62	0.3
ii) Textile & Fibre	249	1.7	243	1.4	188	1.0	207	1.0
iii) Cement	119	0.8	196	1.1	188	1.0	186	0.9
iv) Ceramic & Glass	1.4	0.1	20	0.1	19	0.1	21	0.1
v) Chemicals & Allied	80	0.5	73	0.4	94	0.5	124	0.6
vi) Aluminium	3	Neg.	4	Neg.	3	-	-	Neg.
vii) Sugar	38	0.3	48	0.3	56	0.3	62	0.3
viii) Mining & Quarrying	414	2.8	514	2.9	545	2.9	579	2.8
ix) Engg.(Mech. & Elec.)	135	0.9	165	0.9	150	0.8	166	0.8
x) Fertilizers	36	0.2	26	0.2	19	0.1	22	0.1
xi) Other Industries & Construction	112	0.8	154	0.9	38	0.2	166	0.8
Total IV	1263	8.5	1500	8.5	1353	7.2	1594	7.7
V. Misc.Services(Incl.DGS&D)	434	2.9	411	2.3	395	2.1	435	2.1
GRAND TOTAL:	13696	100.0	17657	100.0	18795	100.0	20706	100.0

P = Provisional

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF LDO & FO DURING 1985-86 TO 1989-90.

(Qty. '000' Tonnes)

SECTOR	1985-86 Consum-ption	% to Total	1987-88 Consum-ption	% to Total	1988-89 Consum-ption	% to Total	1989-90(P) Consum-ption	% to total
1.	2.	3.	4.	5.	6.	7.	8.	9.
			L.D.O					
I. Transport:								
i) Railways	7	0.6	6	0.5	11	0.8	4	0.3
ii) Water ways:								
a) Coastal&Inland Bunkers	40	3.6	33	2.6	36	2.5	36	2.4
b) International Bunkers	31	2.8	44	3.5	42	2.9	37	2.5
iii) Other transport (incl. Agr. retail trade)	8	0.7	18	1.4	7	0.5	8	0.5
Sub - T O T A L - 1:	86	7.7	101	8.0	96	6.7	85	5.7
II. Plantation/Food (incl. Processing)	30	2.7	32	2.6	33	2.3	36	2.4
III. Power Generation (Utili)	255	22.7	251	20.2	346	24.1	325	21.9
IV. Industry								
i) Iron & Steel	40	3.5	36	2.9	43	3.0	45	3.0
ii) Textile & Fibre	26	2.3	28	2.3	40	2.8	39	2.6
iii) Cement	9	0.8	10	0.8	10	0.7	25	1.7
iv) Ceramics & Glass	33	2.9	41	3.3	47	3.3	49	3.3
v) Chemicals & Allied	67	6.0	91	7.3	119	8.3	101	6.8
vi) Aluminium	1	0.1	5	0.4	6	0.4	10	0.7
vii) Sugar	4	0.4	2	0.2	1	0.1	1	0.1
viii) Mining & Quarrying	10	0.9	13	1.0	9	0.6	10	0.7
ix) Engg. (mech.& Elec.)	104	9.2	115	9.2	109	7.6	113	7.6
x) Fertilizers	10	0.9	6	0.5	7	0.5	8	0.5
xi) Other Industries & Construction	93	8.3	173	13.9	214	14.9	208	14.0
Total IV	397	35.3	520	41.8	604	42.0	609	41.0
V. Misc. Services (incl. DGS&D)	355	31.6	341	27.4	358	24.9	431	29.0
T O T A L :	1123	100.0	1245	100	1437	100	1486	100.0
			F.O. (Regular):					
I. Transport:								
i) Railways	44	1.1	37	0.9	32	0.7	22	0.5
ii) Water ways:								
a) Coastal & Inland Bunke	168	4.4	200	4.8	170	3.7	180	4.0
b) International Bunkers	64	1.7	165	3.9	111	2.4	144	3.2
iii) Other transport (incl. Agr. retail trade)	14	0.4	14	0.3	147	3.2	31	0.7
Sub - T O T A L - 1:	290	7.6	416	9.9	461	10.0	377	8.4
II. Plantation/Food (incl. Processing)	132	3.5	130	3.1	152	3.3	148	3.3
III. Power Generation (Utilities)	804	21.1	636	15.2	617	13.4	691	15.4
IV. Industry								
Iron & Steel	170	4.5	161	3.8	267	5.8	310	6.9
Textile & Fibre	225	5.9	230	5.5	276	6.0	332	7.4
Cement	40	1.0	40	1.0	46	1.0	49	1.1
Ceramics & Glass	83	2.2	87	2.1	92	2.0	72	1.6
Chemicals & Allied	553	14.5	508	12.1	640	13.9	593	13.2
Aluminium	60	1.6	74	1.8	101	2.2	90	2.0
Sugar	14	0.4	11	0.3	14	0.3	13	0.3

(P) = Provisional.

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF FO & LSHS: 1985-86 to 1989-90

(Qty.'000' Tonnes)

SECTOR	1985-86		1987-88		1988-89		1989-90(P)	
	Consumption	% to Total	Consumption	% to Total	Consumption	% to Total	Consumption	% to total
1.	2.	3.	4.	5.	6.	7.	8.	9.
			FO (Regular)					
viii) Mining & Quarrying	53	1.4	39	0.9	64	1.4	76	1.7
ix) Engg. (Mech. & Elec.)	168	4.4	151	3.6	152	3.3	153	3.4
x) Fertilizers	500	13.1	979	23.3	1137	24.7	840	18.7
xi) Other Industries & Construction	471	12.4	485	11.6	502	10.9	548	12.2
Total IV	2337	61.4	2765	66.0	3205	69.6	3076	68.5
V. Misc. Services (incl. DGS&D)	243	6.4	244	5.8	170	3.7	198	4.4
SUB TOTAL	3806	100.0	4191	100.0	2527	100.0	4490	100.0
			LSHS/HHS (Rev.)					
I. Transport	4	0.1	2	0.1	4	0.1	4	0.1
II. Plantation/Food (incl. Processing)	34	0.8	36	0.9	34	0.9	43	1.0
III. Power Generation (Utilit)	1526	37.3	1659	42.0	1571	40.8	1593	36.8
IV. Industry								
1. Iron & Steel	229	5.6	198	4.1	189	4.9	178	4.1
2. Textile & Fibre	234	5.7	212	5.4	177	4.6	234	5.4
3. Cement	16	0.4	29	0.7	27	0.7	35	0.8
4. Chemicals & Glass	102	2.5	104	2.6	89	2.3	113	2.6
5. Chemicals & Allied	461	11.3	579	14.6	504	13.1	381	8.8
6. Aluminium	55	1.3	46	1.2	54	1.4	82	1.9
7. Sugar	1	Neg	2	0.1	1	Neg.	-	Neg.
8. Mining & Quarrying	82	2.0	29	0.7	23	0.6	26	0.6
9. Engg. (Mech. &Elec.)	22	0.6	31	0.8	23	0.6	30	0.7
10. Fertilizers	1032	25.2	873	22.1	951	24.7	1269	29.3
11. Other Industries & Construction	131	3.2	139	4.4	196	5.1	325	7.5
Total IV	2365	57.8	2242	56.7	2234	58.0	2673	61.7
V. Misc. Services (incl. DGS&D)	165	4.0	14	0.3	8	0.2	17	0.4
TOTAL:	4094	100.0	3953	100.0	3851	100	4330	100.0

P = Provisional

CONSUMPTION OF DIESEL OIL IN INDIAN RAILWAYS DURING 1960-61 TO 1989-90.

Year	No.of Diesel Locomotives Nos.	Consumption of Diesel Oil (In Kls.)	Consumption of Diesel per Locomotive (In.Kls.)
1.	2.	3.	4.
1960-61	181	62771	346.8
1961-62	228	59444	260.7
1962-63	349	98481	282.2
1963-64	486	182328	375.2
1964-65	621	245633	395.5
1965-66	727	310813	427.5
1966-67	776	365582	471.1
1967-68	892	427126	478.8
1968-69	996	486084	488.0
1969-70	1091	536301	491.6
1970-71	1169	569025	486.8
1971-72	1288	626983	486.8
1972-73	1431	667414	466.4
1973-74	1610	683140	424.3
1974-75	1702	720047	423.1
1975-76	1803	797610	442.4
1976-77	1903	867330	455.8
1977-78	2025	949077	468.7
1978-79	2126	960545	451.8
1979-80	2243	992060	442.3
1980-81	2403	1067477	444.2
1981-82	2520	1179682	468.1
1982-83	2638	1227236	465.2
1983-84	2800	1313200	459.0
1984-85	2905	1335664	459.8
1985-86	3046	1440269	472.8
1986-87	3182	1536499	482.9
1987-88	3298	1595897	483.9
1988-89	3454	1652555	478.4
1989-90(P)	3613	1678814	464.7

Source : Railway Board.

INDUSTRY/PLANT-WISE OFFTAKE ON NAPHTHA

(Qty.'000' MTs)

Category and Plant	1982-83	1985-86	1986-87	1987-88	1988-89	1989-90(P)
1.	2.	3	4	5	6	7
1. Fertilizer Plants:						
Madras Fertilizer Ltd.	207	209	234	105	205	190
FCI, Durgapur	66	88	94	95	55	47
FCI, Gorakhpur	94	95	98	88	108	98
FCI, Barauni	127	151	115	131	99	73
SFC, Kota	147	172	158	139	152	167
IEL, Kanpur	320	290	305	253	292	321
HSL, Rourkela	62	84	82	75	99	95
GSFC, Baroda	96	130	125	118	126	133
FACT, Cochin	113	95	123	105	138	112
ZAC, Goa	217	220	227	224	212	220
IFFCO, Phulpur	221	205	251	216	299	267
IFFCO, Kalol	54	42	46	49	47	43
MCFL, Manglore	124	127	162	103	151	110
SPIC, Tuticorin	263	260	270	234	269	270
EID Parry Ltd.Madras	4	-	-	--	--	--
GNFC, Bharuch	1	1	1	NEG.	NEG.	NEG.
FACT, Alwaye	54	62	65	61	76	61
FCI, Bombay	45	-	-	13	--	--
Coromandal Ferts.Vizag	66	84	73	66	66	62
Others	-	45	59	--	--	29
Sub-Total Fertilizer	2281	2360	2488	2075	2392	2302
II.Petrochemical Plants:						
BRPL, Bongaigaon	-	3	-	24	16	22
HCC, Rasayani	4	4	4	4	4	5
IPCL, Baroda	372	406	444	451	455	413
NOCIL, Bombay	200	222	259	264	299	288
FCI, Bombay(Mathanol)	16	14	13	--	15	9
UCIL, Bombay	66	69	4	--	--	--
Rama Petro Chemicals	--	--	--	--	48	41
Reliance Ind.Ltd.	--	--	--	--	59	180
Others	-	-	-	-	1	19
Sub-Total(Petro-Chem.)	658	718	724	743	897	977
III.Others.						
FCI Talchar	--	--	--	--	4	2
DESU	--	--	--	--	56	62
HSL, Bhilai etc.	19	28	37	34	11	2
HCL, Khetri	--	--	--	--	4	5
Sub-Total(others)	19	28	37	34	75	71
GRAND TOTAL: (I + II + III)	2958	3106	3249	2852	3364	3350

Source: Industry Performance Review.

PLANT/CUSTOMER-WISE OFFTAKE OF LSHS/HHS.

(Qty. '000' Tonnes)

Category and Plant	1980-81	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90(P)
1.Power:							
BTPS, Barauni	3.9	47.1	27.0	36.7	36.2	34.7	39.1
GEB, Gandhinagar	25.6	9.2	12.4	26.7	33.4	30.8	34.6
GEB, Kalol	-	-	-	-	-	-	-
GEB, Wanakbori	-	-	25.2	63.7	92.9	92.4	103.9
GEB, Ukai	82.7	70.5	65.0	81.7	59.3	57.8	65.0
GNTP, Bhatinda	-	-	-	-	5.2	3.9	4.4
DPH, Dhuwaran	616.6	637.0	659.1	727.3	760.0	739.4	831.4
DTPS, Durgapur	-	-	-	-	-	-	-
OTPS, Obra	-	2.5	-	1.3	5.6	7.7	8.6
TTP, Tuticorin	-	13.5	-	8.8	8.3	7.7	8.6
Tata Thermal Bombay	397.6	568.3	615.2	411.2	528.4	516.0	580.2
AEC, Ahmedabad	29.1	28.4	18.0	-	-	-	-
GEB/ASEB, Chandrapur	26.5	24.6	19.0	46.0	54.2	53.9	60.6
ASEB, Gauhati	-	-	-	-	-	-	-
MSEB, Koradi	-	-	-	0.4	-	-	-
MSEB, Uran	-	-	-	-	-	-	-
MSEB, Nasik	-	40.6	32.2	40.2	25.4	23.1	25.9
NLC, Nayveli	-	-	-	-	-	-	-
ETP, Ennore	-	13.7	8.2	10.5	8.1	7.7	8.6
Others	-	6.7	38.5	34.5	42.1	42.4	47.6
Sub-Total-1:	1182.0	1462.1	1526.0	1489.0	1659.1	1617.4	1818.5
2. FERTILIZER/PETRO-CHEMICALS							
NFL, Nangal	120.8	181.9	193.6	105.9	52.8	53.9	60.6
NFL, Bhatinda	70.7	157.9	143.0	98.6	79.5	77.0	86.6
NFL, Panipat	30.4	104.2	95.8	98.8	52.5	50.1	56.4
HFC, Barauni	0.7	15.6	22.8	18.8	19.5	19.3	21.7
FCI, Sindri	14.8	176.9	94.4	151.4	64.5	61.6	69.3
FCI, Talchar	-	13.8	19.6	14.9	22.7	23.1	25.9
IFFCO, Phulpur	-	29.6	41.3	40.8	13.3	11.6	13.0
IFFCO, Kalol	41.4	45.9	32.0	-	38.9	38.5	43.2
IPCL,Baroda(GA&GO)	100.3	221.8	234.6	226.2	225.8	219.5	246.8
GSFC, Baroda/Bajuwa	33.0	56.0	79.3	99.8	64.2	61.6	69.3
GNFC, Bharuch	1.4	184.2	232.1	303.8	269.8	261.9	294.4
FACT, Cochin	64.4	56.0	52.1	64.8	39.4	42.4	47.7
HOC, Rasayani	15.0	11.1	6.1	13.1	7.3	7.7	8.6
Petrochem=Bongaigaon	-	-	-	-	-	-	-
Bombay	-	16.0	14.7	3.8	2.6	3.9	4.4
SPIC, Tuticorin	-	53.2	117.9	137.6	46.4	46.2	52.0
MRL/MFL,Madras	-	48.0	65.6	78.9	31.4	30.8	34.6
NLC, Neyeli	-	37.6	69.9	75.5	73.0	69.3	77.9
Corom.Fert.Vizag	-	27.3	26.9	31.0	37.3	34.7	39.1
Others Misc.	-	50.1	1.5	4.8	13.2	11.6	13.0
Sub-Total-2:	429.9	1495.7	1543.2	1568.2	1154.1	1124.5	1264.5
3. STEEL PLANTS:							
TISCO, Jamshedpur	19.5	59.9	58.9	50.4	49.0	46.2	52.0
RSP, Rourkela	7.1	62.2	57.8	46.7	51.2	50.1	56.4
DSP, Durgapur	24.0	76.4	78.7	44.3	55.7	53.9	60.6
HSL, Bhilai	-	4.5	33.2	46.6	37.6	38.5	43.2
BASL Patratu	-	-	-	5.1	4.8	3.9	4.3
Sub-Total-3:	50.6	203.0	228.6	193.1	198.3	192.6	216.5
4. GENERAL TRADE:	342.0	526.6	728.7	1003.2	941.6	916.5	1030.5
GRAND TOTAL :	2067.5	3687.4	3988.0	4253.5	3953.1	3851.0	4330.0

Source = Industry Performance Review.

STATE-WISE FUEL CONSUMPTION AND POWER GENERATION IN GAS TURBINE AND DIESEL POWER STATIONS IN INDIA DURING 1986-87.

(Provisional)

STATE	Gas Station		Diesel Stations		
	Natural Gas @ (Mn.cubic Metres)	Generation (GWH)	Diesel Oil (KL)	Generation (GWH)	Average Oil Consumption (Lts/KWH)
1.	2.	3.	4.	5.	6.
Assam	240.87	537.15	-	-	-
Gujarat	440 (KL) Oil	0.98	38	0.06	0.63
Himachal Pradesh	-	-	14(E)	0.02	0.70
Manipur	-	-	569	1.37	0.42
Nagaland	-	-	117	0.24	0.49
Sikkim	-	-	190(E)	0.50	0.38
Tripura	21.89	34.08	713(E)	2.00	0.36
West Bengal	17736 (Oil)	38.32	400(E)	0.67	0.60
Maharashtra	837.40(Gas) + 700(KL)Oil	2579.93	-	-	-
Tamil Nadu	-	-	-	2.00($)	-
UNION TERRITORIES:					
A & N Islands	-	-	7722	22.37	0.35
Arunachal Pradesh	-	-	1114	4.34	0.26
Chandigarh	-	-	8 (E)	0.02	0.40
Lakshadweep	-	-	2209	5.64	0.39
Delhi	51875(KL)Oil	149.65	-	-	-
Mizoram	-	-	8706	20.25	0.43
All in total	1100.16(Gas) + 70751(Oil)	3340.11	21800	59.48	0.37

(E) = Estimated

($) = Windmill generation

SOURCE: Central Electricity Authority.

STATEWISE CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FROM THERMAL POWER STATIONS IN INDIA DURING 1986-87
(Provisional)

State	Fuel Coal '000' (Tonnes)	Consumption in Steam Power Station					Heat Input (K.Cal x 10)	Gross Generation GWH	Average Heat Input (K.Cal/KWH
		Lignite '000' (Tonnes)	FO '000' (K.L.)	LDO '000' (KL)	LSHS/ '000' (MT)	Natural Gas (MCM)			
1	2	3	4	5	6	7	8	9	10
Andhra pradesh	5647	-	11	9	6	-	21253.54	7281.97	2919
Assam	130	-	27	Neg	40	35.12	1706.00	459.56	3712
Bihar	2922	-	-	117	45	-	14396.25	3485.70	4142
Gujarat	6732	-	858	8	68	100.04	41287.86	14142.76	2919
Haryana	1243	-	23	10	-	-	6345.79	1478.58	4292
Karnataka	767	-	20	4	-	-	2995.40	1267.00	2364
Madhya Pradesh	9825	-	164	1	-	-	36195.55	12274.37	2949
Maharashtra	13080	-	111	45+206	456	557928 (MT) (B)	64233.71	21665.33	2965
Orissa	1128	-	14	11	-	-	4794.44	1307.16	3668
Punjab	3530	-	31	2	-	-	14982.72	5140.49	2915
Rajasthan	746	-	-	3	-	-	2819.84	1040.41	2710
Talmil Nadu	4325	-	11	7	22	-	17385.01	6129.05	2836
Uttar Pradesh	7710	-	112	13	-	-	30141.00	9516.45	3167
West Bengal	5207	-	13	98	-	-	26124.11	8587.74	3042
C.Govt. Project	12751	6957	166	19	-	-	68175.75	24716.88	12905
DVC	3586	-	80	-	-	-	17301.86	5325.60	3249
UNION TERRITORIES									
A & N Islands	-	-	-	Neg	-	-	1.64	0.64	2563
Delhi	1225	-	31	1	-	-	5701.21	1642.11	3472
All India Total	80554	6957	1672	348+ 206*	637	136.16+ 557928 (MT (B)	375841.68	125451.80	2996

(*) Superior Kerosene Oil
(B) Refinery Gas
Source : Central Electricty Authority

XI. FOREIGN TRADE

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLUEM PRODUCTS 1970 TO 1989

(Qty:'000' Tonnes, Value :Rs. Crores)

Year	Crude Oil		Products		Total	
	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7
			GROSS IMPORTS			
1970	11665	102.36	970	30.53	12635	132.89
1975	13600	992.02	2291	199.46	15891	1191.48
1980	15976	3038.66	6800	1788.28	22776	4826.94
1981	15528	3793.83	5697	1638.58	21225	5432.41
1982	17327	4116.89	4942	1551.37	22269	5668.26
1983	15552	3471.47	4260	1246.60	19812	4718.07
1984	14620	3525.15	6043	1850.31	20663	5375.46
1985	14811	3808.74	4292	1440.70	19103	5249.44
1986	14481	2069.65	3362	818.06	17843	2887.71
1987	17977	3105.25	3659	884.69	21636	3989.94
1988	17712	2811.28	5554	1273.36	23266	4084.64
1989(P)	18919	3718.63	6489	2106.33	25408	5824.96
			EXPORTS			
1970	-	-	412	5.72	412	5.72
1975	-	-	166	13.83	166	13.83
1980	-	-	70	17.98	70	17.98
1981	-	-	55	15.13	55	15.13
1982	4391	1044.71	648	101.23	5039	1145.94
1983	4723	1041.87	1148	286.64	5871	1328.51
1984	6760	1598.55	1071	271.63	7831	1870.18
1985	2044	503.88	1695	482.06	3739	985.94
1986	-	-	2364	389.32	2364	389.32
1987	-	-	3455	662.07	3455	662.07
1988	-	-	2267	472.85	2267	472.85
1989(P)	-	-	2532	654.83	2532	654.83
			NET IMPORTS			
1970	11665	102.36	558	24.81	12223	127.17
1975	13600	992.02	2125	185.63	15725	1177.65
1980	15976	3038.66	6730	1770.30	22706	4808.96
1981	15528	3793.83	5642	1623.45	21170	5417.28
1982	12936	3072.18	4294	1450.14	17230	4522.32
1983	10829	2429.60	3112	959.96	13941	3389.56
1984	7860	1926.60	4972	1578.68	12832	3505.28
1985	12767	3304.86	2597	958.64	15364	4263.50
1986	14481	2069.65	998	428.74	15479	2498.39
1987	17977	3105.25	204	222.62	18181	3327.87
1988	17712	2811.28	3287	1273.36	20999	3611.79
1989(P)	18919	3718.63	3958	1451.49	22877	5170.12

(P) Provisional.

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLUEM PRODUCTS 1970-71 TO 1989-90

(Qty.'000' Tonnes, Value: Rs.Crores)

Year	Crude Oil		Products		Total	
	Qty.	Value	Qty.	Value	Qty.	Value
1.	2.	3.	4.	5.	6.	7.
			GROSS IMPORTS			
1970-71	11683	106.72	1084	29.91	12767	136.63
1975-76	13624	1051.76	2218	204.34	15842	1256.10
1980-81	16248	3348.97	7289	1917.52	23537	5266.49
1981-82	15298	3736.38	4884	1453.16	20182	5189.54
1982-83	16949	4043.74	5028	1553.94	21977	5597.68
1983-84	15967	3541.05	4328	1270.75	20295	4811.80
1984-85	13642	3430.34	6092	1914.91	19734	5345.25
1985-86	15144	3686.80	3865	1273.60	19009	4960.40
1986-87	15476	2120.19	3048	652.70	18524	2772.89
1987-88	17732	2986.31	3949	978.69	21681	3965.00
1988-89	17811	2862.80	6258	1515.59	24069	4378.39
1989-90(P)	19490	4089.55	6543	2227.82	26033	6317.37
			EXPORTS			
1970-71	--	--	332	4.67	332	4.67
1975-76	--	--	170	13.96	170	13.96
1980-81	--	--	36	8.41	36	8.41
1981-82	838	196.23	55	15.13	893	211.36
1982-83	4552	1063.37	795	133.79	5347	1197.16
1983-84	5522	1231.10	1472	356.96	6994	1588.06
1984-85	6478	1563.16	933	255.03	7411	1818.19
1985-86	528	135.15	1963	509.58	2491	644.72
1986-87	--	--	2491	411.23	2491	411.23
1987-88	--	--	3412	648.75	3412	648.75
1988-89	--	--	2295	523.63	2295	523.63
1989-90(P)	--	--	2593	695.56	2593	695.56
			NET IMPORTS			
1970-71	11683	106.72	752	25.24	12435	131.96
1975-76	13624	1051.76	2048	190.38	15672	1242.14
1980-81	16248	3348.97	7253	1909.11	23501	5258.08
1981-82	14460	3540.15	4829	1438.03	19289	4978.18
1982-83	12397	2980.37	4233	1420.15	16630	4400.52
1983-84	10445	2309.95	2856	913.79	13301	3223.74
1984-85	7164	1867.18	5159	1659.88	12323	3527.06
1985-86	14616	3551.65	1902	764.02	16518	4315.67
1986-87	15476	2120.19	557	241.47	16033	2361.66
1987-88	17732	2986.31	537	329.94	18269	3316.25
1988-89	17811	2862.80	3963	991.96	21774	3854.76
1989-90(P)	19490	4089.55	3950	1532.26	23440	5621.81

P = Provisional

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLUEM PRODUCTS 1985 TO 1989

(Qty.'000'Tonnes Value:Rs.Crores)

ITEM	1985		1986		1987		1988		1989(P)	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9	10	11
				GROSS IMPORTS						
A. Crude Oil	14811	3808.74	14481	2069.65	17977	3105.25	17712	2811.28	18919	3718.63
B. Petroleum Products										
I. Light Distillates	175	57.45	37	7.25	116	35.63	215	64.10	294	91.80
1. Naphtha	100	30.42	17	1.85	16	3.89	--	--	--	--
2. Others	75	27.03	20	5.40	100	31.74	215	64.10	294	91.80
II.Middle Distillates	3913	1275.03	3083	710.14	3346	765.77	4551	1000.41	5854	1818.79
1. ATF	121	40.25	150	30.32	26	6.23	78	17.78	213	69.19
2. SKO	2466	824.41	2078	496.06	2215	512.00	2407	552.80	2685	870.57
3. HSDO	1326	410.37	855	183.76	1101	245.81	2066	429.83	2956	879.03
4. LDO	--	--	--	--	--	--			--	--
III. Heavy Ends	204	108.22	242	100.67	197	83.29	788	208.85	341	195.74
1. FO	20	4.39	--	--	--	--	465	52.19	--	--
2. Lubes	184	103.75	218	80.36	184	70.81	303	134.51	321	174.57
3. Waxes	Neg.	0.08	24	21.31	13	12.48	20	22.15	20	21.17
4. Others	--	--	--	--	--	--	--	--	--	--
Total (B)	4292	1440.70	3362	818.06	3659	884.69	5554	1273.36	6489	2106.33
Grand Total (A+B)	19103	5249.44	17843	2887.71	21636	3989.94	23266	4084.64	25408	5824.96
				EXPORTS @						
A. Crude Oil	2044	503.88	--	--	--	--	--	--	--	--
B. Petroleum Products										
I. Light Distillates	1448	410.58	2200	336.65	2637	532.11	2024	410.78	2384	627.07
1.Naphtha	1433	404.19	2184	330.19	2619	527.08	2002	403.87	2014	560.14
2.Others	15	6.39	16	6.46	18	5.03	22	6.91	310	66.93
II.Middle Distillates	128	46.55	146	47.90	172	44.91	193	55.86	60	17.28
1.HSD/LDO	67	22.81	75	24.22	88	22.42	99	27.67	28	8.16
2.Others	61	23.74	71	23.68	84	22.49	94	28.19	32	9.12
III.Heavy Ends	119	24.93	18	4.77	646	85.05	50	6.21	87	10.49
1. FO	110	21.97	16	3.76	644	84.02	49	5.43	84	9.52
2. Others	9	2.96	2	1.01	2	1.03	1	0.78	3	0.97
Total (B)	1695	482.06	2364	389.32	3455	662.07	2267	472.85	2531	654.84
Grand Total (A+B)	3739	985.94	2364	389.32	3455	662.07	2267	472.85	2531	654.84
				NET IMPORTS						
A. Crude Oil	12767	3304.86	14481	2069.65	17977	3105.25	17712	2811.28	18919	3718.63
B. Petroleum Prod.	2597	958.64	998	428.74	204	222.62	3287	800.51	3958	1451.49
Total (Net Imports)	15364	4263.50	15479	2498.39	18181	3327.87	20999	3611.79	22877	5170.12

@ = Includes supplies of POL Products to Nepal w.e.f. 1.4.83 onwards. P = Provisional.

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLUEM PRODUCTS DURING 1985-86 TO 1989-90

(Qty.'000'Tonnes, Value:Rs.Crores)

ITEM	1985-86		1986-87		1987-88		1988-89		1989-90(P)	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9	10	11
GROSS IMPORTS										
A. Crude Oil	15144	3686.80	15476	2120.19	17732	2986.31	17811	2862.80	19490	4089.55
B.Petroleum Products										
I. Light Distillates	38	13.90	55	9.90	169	50.26	245	70.67	310	103.34
1. Naphtha	--	--	34	5.73	--	--	--	--	--	--
2. Others	38	13.90	21	4.17	169	50.26	245	70.67	310	103.34
II.Middle Distillates	3608	1147.27	2758	550.29	3549	829.45	5231	1227.47	5912	1941.18
1. ATF	150	45.84	108	18.08	39	9.64	36	8.84	268	87.98
2. SKO	2568	844.41	1900	383.78	2181	522.24	2747	679.96	2596	888.78
3. HSD	890	257.02	750	148.43	1329	297.57	2448	538.67	3048	964.42
III. Heavy Ends	219	112.43	235	92.51	231	98.98	782	217.45	321	183.30
1. Furnace Oil	20	4.39	--	--	--	--	465	52.19	--	--
2. Lubes	195	105.10	219	80.65	216	85.33	293	138.29	321	183.30
3. Waxes	4	2.94	16	11.86	15	13.65	24	26.97	--	--
Total (B)	3865	1273.60	3048	652.70	3949	978.69	6258	1515.59	6543	2227.82
Grand Total (A+B)	19009	4960.40	18524	2772.89	21681	3965.00	24069	4378.39	26033	6317.37
EXPORTS @										
A. Crude Oil *	528	135.15	--	--	--	--	--	--	--	--
B. Petroleum Products										
I. Light Distillates	1812	455.21	2237	353.07	2637	522.94	2067	456.67	2378	668.41
1. Naphtha	1796	448.52	2220	347.07	2618	517.59	1984	440.87	1932	561.91
2. Others	16	6.69	17	6.00	19	5.35	83	15.80	446	106.50
II.Middle Distillates	130	48.05	154	45.77	176	46.21	215	63.17	--	--
1.HSD/LDO	66	23.19	80	23.30	89	22.20	100	28.98	--	--
2.Others	64	24.86	74	22.47	87	24.01	115	34.19	--	--
III.Heavy Ends	21	6.32	100	12.39	599	79.60	13	3.79	215	27.15
1. FO/LSHS	14	3.81	99	11.68	598	78.71	10	2.12	215	27.15
2. Others	7	2.51	1	0.71	1	0.89	3	1.67	--	--
Total (B)	1963	509.58	2491	411.23	3412	648.75	2295	523.63	2593	695.56
Grand Total (A+B)	2491	644.73	2491	411.23	3412	648.75	2295	523.63	2593	695.56
NET IMPORTS										
A. Crude Oil	14616	3551.65	15476	2120.19	17732	2986.31	17811	2862.80	19490	4089.55
B. Petroleum Prod.	1902	764.02	557	241.47	537	329.94	3963	991.96	3950	1532.26
GRAND TOTAL NET IMPORTS	16518	4315.67	16033	2361.66	18269	3316.25	21774	3854.76	23440	5621.81

@ = Includes supplies of POL Products to Nepal. (P) = Provisional.

* = Including export of BH crude consigned under processing arrangements.

TREND IN INDIA'S OVERALL TRADE BALANCE AND TRADE BALANCE WITH OPEC COUNTRIES

(Rs./Crores)

Year	India's Overall Trade					India's Trade with OPEC Countries					% of India's trade with OPEC to India's total trade	
	Exports	Imports	Balance of Trade	% variation Over Preceding Year		Exports	Imports	Balance of Trade	% variation over preceding Year			
				Exports	Imports				Exports	Imports	Exports	Imports
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1970-71	1535	1634	- 99	8.6	3.3	99	126	-27	-	-	6.4	7.7
1971-72	1608	1825	-217	4.8	11.7	76	182	-106	-23.2	44.4	4.7	10.0
1972-73	1971	1867	+104	22.6	2.3	94	200	-106	23.7	9.9	4.8	10.7
1973-74	2523	2955	-432	28.0	58.3	187	532	-345	98.9	166.0	7.4	18.0
1974-75	3329	4519	-1188	32.0	52.9	467	1100	-633	149.7	106.8	14.0	24.3
1975-76	4036	5265	-1229	21.2	16.5	633	1166	533	35.6	6.0	15.7	22.1
1976-77	5142	5074	+ 72	27.4	-3.6	707	1296	589	11.7	11.2	13.8	25.5
1977-78	5408	6020	-612	5.2	18.6	674	1340	666	4.7	3.4	12.5	22.3
1978-79	5726	6811	-1085	5.9	13.1	733	1382	649	8.8	3.1	12.8	20.3
1979-80	6418	9143	-2725	12.1	34.2	717	2410	1693	2.2	74.4	11.2	26.4
1980-81	6711	12549	-5838	4.6	37.3	745	3488	-2743	3.9	44.7	11.1	27.8
1981-82	7806	13608	-5802	16.3	8.4	940	3770	-2830	26.2	7.7	12.0	27.6
1982-83	8803	14293	-5490	12.8	5.0	820	3899	-3079	-12.8	3.5	9.8	27.2
1983-84	9771	15832	-6061	11.0	10.8	882	3225	-2343	- 7.6	16.3	9.0	20.6
1984-85	11744	17134	-5390	20.2	8.2	944	3326	2282	7.0	0.6	8.0	19.0
1985-86	10895	19658	-8763	(-)7.2	14.7	835	3420	-2585	- 9.6	4.2	7.7	17.4
1986-87	12452	20096	-7644	14.3	2.2	831	1792	- 961	- 0.5	-47.6	6.7	8.9
1987-88	15741	22399	-6658	26.4	11.5	980	3319	-2339	17.9	85.2	6.2	14.8
1988-89	20302	28194	-7892	29.0	25.9	1207	3681	-2474	23.2	10.9	6.0	13.1
1989-90(P)	27681	35412	-7731	36.3	25.6	1841	5074	-3233	52.5	37.8	6.7	14.3

(P) = Provisional

Source = Ministry of Commerce/Economic survey.

INDIA'S FOREIGN EXCHANGE RESERVES.
(1970-71 TO 1989-90)

Year	S.D.R.S. Million	GOLD (Rs. Crores)	Foreign Exchange (Rs. Crores)
1.	2.	3.	4.
1970-71	148.9	182.53	438.12
1975-76	202.8	182.53	1491.70
1976-77	187.4	187.80	2862.99
1977-78	161.6	193.09	4499.75
1978-79	364.9	219.50	5219.86
1979-80	529.1	224.71	5163.66
1980-81	490.5	225.58	4822.12
1981-82	425.1	225.58	3354.47
1982-83	270.2	225.58	4265.26
1983-84	216.4	225.58	5497.9
1984-85	146.5	245.76	6818.78
1985-86	115.1	274.28	7384.35
1986-87	139.4	274.28	7645.17
1987-88	69.7	274.28	7287.14
1988-89	79.5	274.28	6604.60
1989-90(P)	81.9	274.28	5787.20

SOURCE : Economic Survey/ M.O. Finance P = Provisional
Reserve Bank of India Bulletin March 1988

INDIA'S IMPORTS AS A PROPORTION TO OVERALL EXPORTS FROM THE COUNTRY 1970-71 TO 1989-90.

(Rs. Crores)

Y E A R	POL Imports		India's Total Exports		Gross POL Imports as % age of total gross Exports	Net POL Imports as % age of total Net Exports
	Gross	Net	Gross	Net of POL Exports		
1.	2.	3.	4.	5.	6.	7.
1970-71	137	132	1535	1530	8.9	8.6
1975-76	1256	1242	4036	4022	31.1	30.9
1976-77	1424	1417	5142	5135	27.7	27.6
1977-78	1552	1546	5408	5393	28.7	28.6
1978-79	1681	1677	5726	5722	29.4	29.3
1979-80	3270	3246	6418	6394	51.0	50.8
1980-81	5266	5258	6711	6703	78.5	78.4
1981-82	5191	4978	7806	7594	66.5	65.6
1982-83	5598	4401	8803	7606	63.6	65.6
1983-84	4812	3224	9771	8183	49.2	39.4
1984-85	5345	3527	11744	9926	45.5	35.5
1985-86	4961	4316	10895	10250	45.5	42.1
1986-87	2773	2362	12452	12041	22.3	19.6
1987-88	4015	3366	15741	15092	25.5	22.3
1988-89	4379	3855	20302	19778	21.6	19.5
1989-90*	6318	5622	27681	26985	22.8	20.8

SOURCE : For Column 4 := Ministry of Commerce DGCI&S, Calcutta. * = Provisional

XII. MAN-POWER EMPLOYED.

DIRECT MAN POWER EMPLOYED IN THE PETROLUEM INDUSTRY IN INDIA

(NUMBER)

CATEGORY	1970	1975	1980	1985	1987	1989	1990 *
1.	2.	3.	4.	5.	6.	7.	8.
1. Exploration & Production	26051	27067	31413	48700	52397	55656	56477
2. Refining	10715	12327	15334	23074	23810	24188	25751
3. Marketing	20362	19072	19920	27717	31180	34615	36261
4. Others :-							
1.HPCL(Pipeline)	-	-	-	-	-	-	64
2.IOC(Pipeline)	487	724	1312	1819	1936	1984	2015
3.ONGC(Pipeline)	346	233	411	496	232	444	497
4.OIL(Pipeline)	443	431	492	586	543	591	613
5.I.I.P.	588	676	754	778	739	758	758
6.E.I.L.	N.A.	1940	2661	3702	3685	3604	3465
7.Others	-	-	-	-	-	-	4045
TOTAL	1864	4004	5630	7381	7135	7381	11457
GRAND TOTAL	58992	62470	72297	106872	114522	121840	129946

CATEGORY-WISE DIRECT MAN POWER EMPLOYED IN THE PETROLUEM INDUSTRY IN INDIA

(NUMBER)

CATEGORY	1970	1975	1980	1985	1987	1989	1990 *
1.	2.	3.	4.	5.	6.	7.	8.
1. Executive/ Managerial	4793	6461	9311	21108	25458	28588	31178
2. Supervisory	6205	6659	6512	10432	9691	11067	12229
3. Clerical	11457	11723	12403	15878	15923	16407	17254
4. Workmen	36437	37611	44057	59313	63361	63617	65475
5. TOTAL	58892	61454	72283	106731	114433	119679	126136
6. Expatriates/ Foreign Experts/100 On Contract		16	14	141	89	2161	3810
GRAND TOTAL	58992	62470	72297	106872	115208	121840	129946

Note := 1. Staff Employed as on 1st April of each year.
* = Provisional.

CATEGORY-WISE DIRECT MAN POWER EMPLOYED IN VARIOUS SECTORS OF PETROLUEM INDUSTRY IN INDIA.

(NUMBER)

CATEGORY	1970	1975	1980	1985	1987	1989	1990 *
1.	2.	3.	4.	5.	6.	7.	8.
EXPLORATION AND PRODUCTION							
1. Executive/ Managerial	1765	1967	3394	10183	12831	14432	15864
2. Supervisory	2774	3538	1994	4537	4133	5092	5594
3. Clerical	3764	3538	3795	5438	5002	4938	4749
4. Workmen	17704	18013	22216	28401	30342	29423	28712
5. TOTAL	26007	27056	31399	48559	52308	53885	54919
6. Expatriates/ Foreign Experts Contract	44	11	14	141	89	1771	1558
GRAND TOTAL	26051	27067	31413	48700	52397	55656	56477
PETROLUEM REFINING @							
1. Executive/ Managerial	258	818	2055	3878	4564	4602	5009
2. Supervisory	1076	1313	1050	1648	992	1071	1216
3. Clerical	1219	1568	1791	2728	2690	3265	3427
4. Workmen	7857	8626	10438	14820	15564	14942	14995
5. TOTAL	10677	12325	15334	23074	23810	23880	24647
6. Expatriates/ Foreign Experts/ Contract	38	2	-	-	-	308	1104
GRAND TOTAL	10745	12327	15334	23074	23810	24188	25751
MARKETING							
1. Executive/ Managerial	2367	3519	3318	6047	6972	8320	8586
2. Supervisory	2081	910	1591	1441	1849	2163	2222
3. Clerical	6220	5870	5820	6533	7020	7106	7030
4. Workmen	9680	8770	9191	13696	15339	16964	17302
5. TOTAL	20348	19069	19920	27717	31180	34553	35140
6. Expatriates/ Foreign Experts/ Contract	14	3	-	-	-	62	1121
GRAND TOTAL	20362	19072	19920	27717	31180	34615	36261

@ = Includes IOC's Head Office, Regional office and R & D Centre.
* = Provisional.

Whole Sale Average Price Indices of Petroleum Products, Energy & All Commodities in India

(1981=82 = 100)

Year	Petroleum Crude & Natural Gas	Petroleum Products									Energy Items				All Commodities
		Petrol/ Mogas	Kero-sene	Av-Gas	H.S.D	L.D.O.	FO	Lube Oil	Naph-tha	Bitu-men	Coal	Coke	Lig-nite	Elec-tri-city	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1982-83	103.1	102.4	101.1	104.1	103.3	102.9	102.9	102.1	101.2	103.1	115.9	127.0	116.5	111.5	104.9
1983-84	99.6	103.3	108.6	109.2	108.7	107.2	104.9	103.2	108.2	101.7	128.2	137.6	142.1	120.5	112.8
1984-85	103.0	104.5	109.4	110.3	108.5	109.1	106.1	104.3	110.2	102.2	155.1	153.2	180.8	124.8	120.1
1985-86	103.0	120.6	121.8	128.5	117.0	124.5	121.3	120.9	127.5	116.8	159.1	155.0	189.0	139.6	125.4
1986-87	99.3	127.0	129.9	139.7	120.2	124.5	121.3	124.2	135.1	116.8	174.5	162.2	193.2	153.5	132.7
1987-88	93.5	130.6	129.9	142.6	122.1	124.5	121.4	123.9	123.7	116.8	183.0	162.2	193.1	166.7	143.5
1988-89	89.1	145.2	129.9	139.7	119.8	124.5	121.6	148.3	130.1	117.8	212.3	162.2	197.3	176.6	154.2
1989-90	91.2	146.0	129.9	140.4	120.0	124.9	121.5	152.0	131.0	117.9	231.8	162.2	217.0	187.6	165.6

Source : Ministry of Industry, Office of the Economic Adviser.

Prices of Indigenous Onshore and Offshore Crude Oil in India.
34°API Gravity

Item	Unit	Price effective from							
		14.7.75	8.9.76	16.12.77	1.4.81	11.7.81	15.2.83	1.4.84	1.3.87
				(i) Onshore Crude Oil					
1. Base Price (as fixed by the Govt)	Rs/Bbl	36.64*	33.30*	27.60	27.60	138.54	138.54	138.57	138.54
2. Conversion factor	Bbl./MT	7.37	7.37	7.37	7.37	7.37	7.37	7.37	7.37
3. Base Price	Rs/MT	**270.04	**245.42	203.41	203.41	1021.00	1021.00	1021.00	1021.00
4. Oil Development Cess	Rs/MT	@	60.00	60.00	60.00	100.00	300.00	300.00	600.00
5. Royalty	Rs/MT	@	@	42.00	61.00	61.00#	61.00#	192.00	192.00
6. Total Price (including Cess & Royalty)	Rs/MT	270.04	305.41	305.41	324.41	1182.00#	1382.00#	1573.00	1813.00
				(ii) Offshore Crude Oil					
1. Base Price as fixed by the Govt.	Rs/Bbl			45.00	45.00	138.54	138.54	138.54	138.54
2. Conversion factor	Bbl/MT			7.37	7.37	7.37	7.37	7.37	7.37
3. Base Price	Rs/MT			331.65	331.65	1021.00	1021.00	1021.00	1021.00
4. Oil Development Cess	Rs/MT			60.00	60.00	100.00	300.00	300.00	600.00
5. Royalty	Rs/MT			42.00	61.00	192.00	61.00	61.00	192.00
6. Total Price (including Cess & Royalty)	Rs/MT			433.65	452.65	1182.00#	1382.00#	1513.00	1813.00

* Inclusive of royalty @ Rs. 15/MT and Oil Development Cess @ Rs. 60/MT
** Inclusive of royalty @ Rs.42/MT
@ Included in the base price
Shows price fixed by the Government inclusive of royalty and oil Development Cess.
Note: Upto 31.3.84. Applicable sales tax on ex-central tank farm price of crude oil of 34° API was borne by the producer.
The applicable Sales/Tax on the increase of Rs. 131/MT in the rate of royalty w.e.f. 1.4.84 and increase of cess of Rs. 300/MT w.e.f. 1.3.87 is being borne by pool account.
@@ Fixed retrospectively w.e.f. 1.4.1984.

DEVELOPMENT OF BASIC CEILING SELLING PRICES OF PETROLEUM PRODUCTS (EX-STORAGE POINT BOMBAY) SINCE 17.8.1979.

(Rs./selling Unit)

PRODUCT	Selling Unit	Prior to 17.8 1979	EFFECTIVE DATE 17.8 1979	8.6 1980	13.1 1981	11.7 1981	15.2 1983	17.3 1985	1.2. 1986	6.2. 1986	20.3. 1987	9.1. 1988	1.3. 1988	20.3 1990
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ATF	KL	1377	2117	3217	3537	3872	4122	4740	5240	5240	5240	5240	5240	6560
MS 83/87	"	3538	3888	4538	4908	5438	5438@	6369	6869	6769	6769	7694	7845	8944
MS 93	"	3693	4043	4693	5063	5593	5593	6421	6424	6824	6824	7749	7901	10944
HSDO	"	1209	1377	1960	2330	2650	2850	3078#	3188	3116	3116	3096	3096	3634
SKO	"	1194	1364	1295	1395	1545	1545	1822#	2047	1957	1957	1957	1957	1957
LDO	"	887	1207	1857	2227	2506	2656	3054	3054	3054	3054	3054	3054	3054
Furnace Oil														
For non-ferts	"	889	1209	1859	2189	2424	2524	2903	2903	2903	2903	2903	2903	2903
For ferts*	"	829	829	829	1039	1274	+1274	1320	1320	1320	1320	1320	1320	1320
Bitumen St. Gr.														
Bulk	MT	676	1176	1826	2061	2323	2196	2525	2524	2524	2524	2525	2524	2524
Packed	"	961	1461	2111	2346	2608	2696	3100	3100	3100	3100	3100	3100	3100
Naphtha														
For non-ferts.*	MT	1012	2482	2692	2792	2792	2792	3211	3211	3211	3211	3211	3211	3211
For ferts.*	"	596	596	1071	1371	1723	1723	1982	1982	1982	1982	1982	1982	1982
JBO.*	"	789	989	1679	1999	2358	2358	2712	2712	2712	2712	2712	2712	2712
SBP Spirit:														
64/69*	KL	1111	1861	2961	3331	3629	3629	4173	4173	4173	4173	4173	4173	4173
Hexane*	"	1111	1861	2961	3331	3629	3629	4173	4173	4173	4173	4173	4173	4173
MTO 140/205*	"	762	1124	1774	2044	2348	2348	2700	2700	2700	2700	2700	2700	2700
MTO Laws*	"	844	1206	1856	2126	2430	2430	2794	2794	2794	2794	2794	2794	2794
LPG:														
Domestic	MT	1633	1966	1966	2301	2634	2634	3029	3729	3449	3449	3449	3449	3449
Bulk	"	1927	2260	2260	2595	2928	2928	3978	3978	3978	5001	5001	5001	5001
Industrial	"	--	--	--	--	--	--	5128	5128	5128	6151	6151	6151	6151

NOTE : Prices have been rounded to the nearest Rupee.
* = Prices are exclusive of Customs and Excise Duties.
@ = With the introduction of MS 87, the price of the product was increased to Rs. 5538/KL w.e.f. 1.9.1983
\# = Effective 26.3.1985
\+ = w.e.f. 1.9.83 the price was reduced to Rs. 1148/KL
NA = w.e.f. 1.10.1986 the product JBO, SBP 64/69, Hexane, MTO-140/205, MTO Laws have been kept outside the pricing scheme. LSHS has been brought under the pricing scheme.

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1990

(Rs./K.L.)

	Bombay	Madras	Delhi	Calcutta	Kanpur
MOTOR SPIRIT 87 ON					
Ex-MI/Storage Point Price	8944.07	8944.07	8944.07	8944.07	8944.07
FRT. Differential	--	--	--	29.87	
Railway Freight (Incl.Sdg.Shg.Charges)	--	--	74.93	--	222.64
State Surcharge	--	35.00	25.00	10.00	25.00
Octroi/T.Tax	112.00	--	--	20.00	30.00
Nett. Depot Price	9056.07	8979.07	9044.00	9003.94	9221.71
R.P.O. Charges	11.36	11.36	11.36	11.36	11.36
R.P.O. Surcharge	60.00	60.00	60.00	60.00	60.00
Delivery Charge beyond FDZ	--	--	--	2.88	--
Sub Total	9127.43	9050.43	9115.36	9078.18	9293.07
Sales Tax	1551.66	1629.08	638.08	907.82	929.31
SC on ST/Addl. SC on ST	--	325.81	--	--	--
Dealers Comm.	80.00	80.00	80.00	80.00	80.00
Gross RPO Rate Rs/KL	10759.09	11085.32	9833.44	10066.00	10302.38
R.S.P.RS/LTR	10.76	11.09	9.84	10.07	10.31
Rate of ST	17%	18%	7%	10%	10%
Rate of Surcharge on ST		15%			
Rate of Additional SC on ST		5%			
HIGH SPEED DIESEL OIL					
Ex-MI/Storage Point Price	3633.53	3633.53	3633.53	3633.53	3633.53
FRT. Differential	--	--	--	21.93	
Railway Freight (Incl.Sdg.Shg.Charges)	--	--	76.72	--	226.51
State Surcharge	--	35.00	25.00	1.00	5.00
Octroi/T.Tax	76.03	--	4.68	20.00	30.00
Nett. Depot Price	3709.56	3668.53	3739.93	3676.46	3895.04
R.P.O. Charges	7.27	7.27	7.27	7.27	7.27
R.P.O. Surcharge	20.00	20.00	20.00	20.00	20.00
Delivery Charge beyond FDZ	--	--	--	2.88	--
Sub Total	3736.83	3695.80	3767.20	3706.61	3922.31
Sales Tax	523.16	517.41	263.70	444.79	470.68
SC on ST/Addl. SC on ST	--	103.48	--	--	--
Dealers Comm.	40.00	40.00	40.00	40.00	40.00
Gross RPO Rate	4299.99	4356.69	4070.90	4191.40	4432.99
R.S.P.RS/LTR	4.30	4.36	4.08	4.20	4.44
Rate of ST	14%	14%	7%	12%	12%
Rate of Surcharge on ST	--	15%	--	--	--
Rate of Additional SC on ST	--	5%	--	--	--
STATEMENT SHOWING PRICE BUILD UP FOR LDO.					
Ex.MI Price	3053.97	3053.97	3053.97	3053.97	3053.97
State Surcharge	--	35.00	25.00	--	5.00
Rly/Frt/Frt.Differential	--	--	97.22	22.60	288.93
Octroi/T.Tax	46.55	--	4.82	20.00	50.00
Sub Total	3100.52	3088.97	3181.01	3096.57	3397.90
Sales Tax	248.04	432.46	222.67	371.59	407.75
RSP Rs/KL	3348.56	3521.43	3403.68	3468.16	3805.65
Rate of ST	8%	14%	7%	12%	12%

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1990

	Bombay	Madras	Delhi	Calcutta	Kanpur
SUPERIOR KEROSENE OIL (RS/KL)					
Ex-MI/Storage Point Price	1956.93	1956.93	1956.93	1956.93	1956.93
Rly.Freight/Differential	--	--	61.70	20.81	180.86
State Surcharge		35.00	25.00	--	5.00
Entry tax/T.Tax/SSB T.Tax	58.05	--	15.00	--	--
Sub Total	2014.98	1991.93	2058.63	1977.74	2142.79
Sales Tax	Exempted	79.68	61.76	98.89	171.42
SC on Sales Tax	--	11.95	--	--	17.14
Addl. SC on ST	--	3.98	--	--	--
Transportation	39.83	30.00	42.24	30.00	50.00
Wholesalers/Dealers Comm.	30.30	8.00	14.08	30.00	30.30
Octroi	--	--	--	--	--
Leakage, Ext. Ord. Allo.	38.50	32.84	--	--	--
Sub Total	2123.61	2158.38	2176.71	2136.93	2411.65
Retailers Comm.	39.70	125.60	73.33	39.70	50.00
Local Transportation	--	--	--	22.93	20.00
Leakage Ex.Ord. Allo.	--	--	--	65.00	--
Rounded off to					18.35
R.S.P. RS./KL	2163.31	2283.98	2250.04	2264.56	2500.00
R.S.P. RS./LITRE	2.17	2.29	2.25	2.27	2.50
Rate on Sales Tax	Exempted	4%	3%	5%	8%
Rate of SC on ST	--	15%	--	--	10%
Rate of Addl. SC on ST	--	5%	--	--	--
LIQUIFIED PETROLEUM GAS (Rs.14.2 Kg.cylinder)					
Price at pricing market SC	51.73	51.73	53.62	53.83	55.93
FRT/Local Delivery Charge	0.75	0.75	0.75	0.75	0.75
Octroi	1.31	--	0.38	0.54	--
Sub Total	53.79	52.48	54.75	55.12	56.68
Sales Tax	2.15	4.20	2.74	8.27	4.53
SC on ST	--	0.42	--	--	0.45
Addl. SC on ST	--	0.21	--	--	--
Billable Rate	55.94	57.31	57.49	63.39	61.66
Dist.Comm	3.37	3.37	3.37	3.37	3.37
R.S.P. for 15/Kg. Cyl.	59.31	60.68	60.86	66.76	65.03
R.S.P. for 14.2. Kg. Cyl.	56.15	57.44	57.61	63.20	61.56
Rate of Sales Tax	4%	8%	5%	15%	8%
Rate of SC on Sales Tax	--	10%	--	--	10%
Rate of Addl. SC on ST.	--	5%	--	--	--

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1990.

(Rs./KL)

	Bombay	Madras	Delhi	Calcutta	Kanpur
FUEL OIL (NON-FERTILIZER)					
Ex-MI Price	2903.06	2903.06	2903.06	2903.06	--
State Surcharge	--	35.00	25.00	--	--
Rly. Frt/Frt. differential	--	--	104.56	24.31	--
Octroi/SSB T.Tax	73.92	--	5.18	20.00	--
Sub Total	2976.98	2938.06	3037.80	2947.37	--
Sales Tax	238.16	293.81	212.65	235.79	--
SC on Sales Tax	--	14.69	--	--	--
Addl.SC ON ST	--	14.69	--	--	--
R.S.P. RS/KL	3215.14	3261.25	3250.45	3183.16	--
RATE OF ST	8%	10%	7%	8%	--
Rate of SC on ST	--	5%	--	--	--
Rate of Addl. SC	--	5%	--	--	--

Note: Kanpur, we do not have storage facility.

ATF (DOMESTIC AIRLINES)					
Ex-MI Price	6560.30	6560.30	6560.30	6560.30	6560.30
Frt. Differential	--	--	--	20.39	--
Rly.Frt/	--	--	77.53	--	235.91
BMC Octroi/Local Levy	103.50	--	15.00	--	10.00
Entry Tax	--	--	--	--	--
Shakurbasti T.Tax	--	--	--	--	--
State Surcharge	--	--	25.00	132.10	--
Air Field Charge	24.44	24.44	24.44	24.44	41.94
Post Air Field Price	6688.24	6584.74	6702.27	6737.23	6848.15
Rate of Sales Tax	23%	10%	7%	25%	10%
Rate of SC on ST+ Addl.SC on ST	--	--	--	--	--

* Concessional rate of Sales Tax applicable for supplies to Vayudoot flight only in the State of Maharashtra is Rs.135.75 per KL and it is exempted in West Bengal.

ATF FOR INTERNATIONAL AIRLINES				
Celling Selling Price Ex-MI	364.13	364.13	370.56	365.55
Less Refund of Excise Duty	23.18	23.18	23.18	23.18
Duty Free Price	340.95	340.95	347.38	342.37
Add Applicable Concessional Duty	1.71	1.71	1.71	1.71
Add Air Port/PPA Surcharge	1.70	1.70	1.70	1.70
Total Build up	344.36	344.36	350.79	345.78
Adhoc Surcharge	(104.45)	(104.45)	(104.45)	(104.45)
Grand Total	239.91	239.91	246.34	241.33

Trends in Retail Selling Prices of Selected Petroluem Products in Metropolitan Towns in India.

Prices as on	Bombay	Calcutta	Delhi	Madras	Kanpur
	MOTOR SPIRIT 83 (RS./Litre)				
1.1.1973	1.43	1.46	1.44	1.41	1.47
1.1.1974	2.81	2.82	2.78	2.69	2.73
1.1.1975	3.26	3.27	3.27	3.19	3.35
1.1.1976	3.36	3.39	3.39	3.30	3.47
1.1.1977	3.39	3.38	3.39	3.29	3.48
1.1.1978	3.38	3.38	3.39	3.29	3.48
1.1.1979	4.04	4.04	4.04	4.90	4.14
17.8.1979	4.43	4.42	4.41	4.25	4.52
8.6.1980	5.15	5.14	5.11	4.90	5.22
13.1.1981	5.56	5.54	5.50	5.29	5.62
11.7.1981	6.15	6.13	6.07	6.17	6.19
1.4.1982	6.15	6.13	6.07	6.17	6.19
15.2.1983	6.21	6.16	5.90	6.17	6.25
1.4.1983	6.21	6.31	5.99	6.16	6.15
1.4.1984 (MS-87 ON)	6.32	6.24	6.09	6.44	6.26
1.6.1984	6.41	6.24	6.12	6.44	6.26
17.3.1985	7.34	7.16	7.00	7.39	7.16
1.2.1986	7.90	7.71	7.54	7.96	7.85
6.2.1986/1.4.1986	7.79	7.60	7.43	7.84	7.74
1.4.1987	7.79	7.60	7.43	7.84	7.85
1.4.1988	9.14	8.70	8.50	8.98	8.93
1.4.1989	9.14	8.70	8.50	9.43	8.93
1.4.1990 (MS-87)	10.76	10.07	9.84	11.09	10.31
	HIGH SPEED DIESEL OIL (Rs./Litre)				
1.1.1973	0.83	0.90	0.86	0.87	0.88
1.1.1974	0.81	0.87	0.84	0.88	0.87
1.1.1975	1.06	1.10	1.11	1.15	1.15
1.1.1976	1.28	1.35	1.36	1.36	1.32
1.1.1977	1.27	1.36	1.34	1.35	1.33
1.1.1978	1.27	1.36	1.34	1.35	1.33
1.4.1979	1.39	1.49	1.47	1.49	1.50
17.8.1979	1.58	1.68	1.66	1.66	1.69
11.9.1979	1.50	1.60	1.58	1.59	1.61
8.6.1980	2.21	2.25	2.28	2.24	2.34
13.1.1981	2.61	2.66	2.67	2.66	2.76
11.7.1981	2.96	3.01	3.02	3.05	3.11
1.4.1982	2.96	3.01	3.02	3.05	3.11
15.2.1983	3.21	3.31	3.18	3.27	3.46
1.4.1983	3.21	3.30	3.19	3.26	3.40
1.4.1984	3.21	3.30	3.20	3.34	3.42
1.6.1984	3.27	3.30	3.22	3.34	3.42
17.3.1985	3.52	3.35	3.47	3.60	3.70
26.3.1985	3.45	3.48	3.39	3.52	3.60
1.2.1986	3.64	3.68	3.58	3.73	3.81
6.2.1986/1.4.1986	3.57	3.60	3.50	3.65	3.73
1.4.1987	3.63	3.59	3.50	3.64	3.84
1.4.1988	3.63	3.59	3.50	3.64	3.84
1.4.1989	3.63	3.59	3.50	3.69	3.83
1.4.1990	4.30	4.20	4.08	4.36	4.44

Trends in Retail Selling Prices of Selected Petroluem Products in Metropolitan Towns in India.

Prices as on	Bombay	Calcutta	Delhi	Madras	Kanpur
	SUPERIOR KEROSENE (RS./Litre)				
1.1.1973	0.61	0.65	0.65	0.65	0.74
1.1.1974	0.82	0.84	0.82	0.85	0.86
1.1.1975	1.04	1.05	1.08	1.10	1.25
1.1.1976	1.21	1.25	1.29	1.31	1.39
1.1.1977	1.21	1.24	1.30	1.31	1.34
1.1.1978	1.18	1.24	1.30	1.31	1.34
1.4.1979	1.29	1.38	1.43	1.43	1.47
17.8.1979	1.46	1.56	1.61	1.62	1.66
11.9.1979	1.39	1.49	1.54	1.55	1.59
8.6.1980	1.39	1.49	1.54	1.55	1.59
13.1.1981	1.49	1.60	1.65	1.67	1.70
11.7.1981	1.60	1.76	1.81	1.84	1.90
1.4.1982	1.66	1.80	1.81	1.78	1.90
15.2.1983 Subsidised	1.70	1.80	1.77	1.78	1.90
Non-subsidised	3.00	3.12	3.10	3.15	3.35
18.3.1983	1.80	1.91	1.88	1.89	2.10
1.4.1983	1.80	1.90	1.88	1.88	2.05
1.4.1984	1.81	1.92	1.89	1.88	2.05
1.6.1984	1.85	1.92	1.92	1.88	2.05
17.3.1985	2.10	2.18	2.18	2.15	2.33
26.3.1985	2.03	2.12	2.11	2.08	2.25
1.2.1986	2.26	2.36	2.34	2.34	2.50
6.2.1986/1.4.1986	2.17	2.27	2.25	2.25	2.40
1.4.1987	2.17	2.27	2.25	2.25	2.50
1.4.1988	2.17	2.27	2.25	2.25	2.50
1.4.1989	2.17	2.27	2.25	2.27	2.50
1.4.1990	2.17	2.27	2.25	2.29	2.50
	LIQUIFIED PETROLUEM GAS (RS./Cylinders)				
	14.2 Kg.cyl	15 Kg.cyl	15 Kg.cyl	15 Kg.cyl	15 Kg.cyl
1.1.1975	22.10	27.79	27.36	23.94	27.61
1.1.1976	26.75@	33.31	32.61	29.36	32.85
1.1.1979	26.94@	37.06	34.98	31.90	35.42
17.8.1979	33.96@	42.93	40.23	37.32	40.82
8.6.1980	33.96@	42.93	40.23	37.81	40.82
13.1.1981	38.94@	49.09	45.53	==	46.26
11.7.1981	43.52@	54.84	50.78	48.74	53.06
1.4.1982	43.52@	54.84	50.78	48.74	53.06
1.9.1982	43.14@	51.93	44.58@	47.17	49.41
1.4.1983	43.14@	52.71	45.09@	47.17	50.41
1.4.1984	43.14@	52.71	45.09@	44.65@	47.72@
1.6.1984	44.11@	49.90@	45.47@	44.65@	48.81@
17.3.1985	49.95@	56.34@	51.35@	50.74@	54.89
1.2.1986	60.28@	67.77@	61.79@	61.56@	65.90@
6.2.1986/1.4.1986	56.15@	63.20@	57.61@	57.24@	61.56@
1.4.1987	56.15@	63.20@	57.61@	57.24@	61.56@
1.4.1988	56.15@	63.20@	57.61@	57.24@	61.56@
1.4.1989	56.15@	63.20@	57.61@	57.24@	61.56@
1.4.1990	56.15@	63.20@	57.61@	57.44@	61.56@

@ = For 14.2 Kg. Cylinder.

RATES OF DEALERS COMMISSION FOR MS, HSDO AND LPG IN INDIA

Slab of Annual Volumes of Sales (KL / Annual)	Dealers Commission effective from								
	1.4. 1977	15.7. 1980	1.3. 1981	16.8. 1981	1.10. 1982	15.2. 1983	1.9. 1983	17.3 1985	6.2. 1986
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
MOTOR SPIRIT (Rs./KL) :									
Prior to 1.7.1982 :									
0=480	80*	100	107	114					
481=1080	50*	70	75	82					
Over 1080	35*	50	55	61					
Effective From 1.7.1982:									
0=360					134		135	146	151
361=600					98		99	108	113
601=1080					86		87	95	99
Above 1080					69		70	76	79
HIGH SPEED DIESEL OIL (RS./KL)									
Prior to 1.7.1982:									
0=600	50	55	58	60					
601=1200	25	30	33	35					
Above 1200	20	25	28	30					
Effective from 1.7.1982:									
0=360					79	81		83	84
361=600					58	60		62	63
601=1080					42	43		44	45
Above 1080					36	37		38	39

L.P.G. (RS./CYLINDER):

	Prior to 1st March 1982	Effective from 1.3.1983	Effective from 19.1.1987
Per cylinder	3.37	3.62	5.30**

* = The minimum rate of commission was Rs. 50/KL.

Note: The rates of dealership commission fixed at 3 Annas per imperial for MS in upto 1954 and at 1 Anna and 3 paise per imperial gallon for HSDO in 1955 continued upto 30th June 1976. The revised commission rates effective 1.7.1976 were as follows:

Sales per Annum (Combined MS/HSDO Sales)	(Rs./KL.)	(Rs./KL)
Upto 360	80	50
361 to 720	35	10
721 and above	25	10

** The increase in Commission of LPG will be borne by OCC/Pool A/c in ratio 50:50

XIV. EXCISE/CUSTOM DUTIES AND SALES TAX

REALISATION OF EXCISE & CUSTOM DUTIES FROM CRUDE OIL AND PETROLEUM PRODUCT DURING 1970-71 TO 1989-90 (R.E.) AND 1990-91 (B.E.)

(Rs./Crores)

Products	Actuals								
	1970 -71	1975 -76	1980 -81	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90 (RE)	1990 -91 (BE)
1.	2	3	4	5	6	7	8	9	10
A. EXCISE DUTIES									
1. Mogas	173	404	493	749	814	903	1034	1181	1237
2. Kerosene Oil	121	161	124	203	233	250	241	269	273
3. Refined Diesel Oil & Vaporising Oil	232	300	280	563	596	646	683	731	765
4. Diesel Oil (Nos.)	23	21	20	23	27	28	29	30	39
5. Furnace Oil	33	49	45	39	37	34	46	58	53
6. Asphalt/Bitumen & Tar	9	11	16	32	-	-	-	-	-
7. Blended or Compounded Lubes & Greases	-	45	-	-	-	-	-	-	-
8. Petroleum Products (Nos.)	17	46	175	203	277	280	314	327	366
9. Calcined Pet. Coke	-	3	5	(included in item No-6 above)					
10. Petroleum Gas	-	-	-	33	50	58	59	64	67
TOTAL (A)	608	1040	1158	1845	2034	2199	2406	2660	2800
B. CUSTOM DUTIES									
1. Petroleum Crude	-	13	16	874	857	1862	1917	2065	1904
2. Mogas	5	9	8	6	-	-	-	-	-
3. Kerosene Oil	10	37	83	101	218	274	396	556	454
4. Batching Lubricating & Other Mineral Oils	9	21	103	35	-	-	-	-	-
5. HSD & Vap. Oil	1	26	127	33	56	84	160	202	146
6. Indl. Fuel Oil	5	9	17	1	-	-	-	-	-
TOTAL (B)	30	115	354	1050	1131	2220	2473	2823	2504
GRAND TOTAL (A+B)	638	1155	1512	2895	3165	4419	4879	5483	5304

Figures rounded to nearest crores.

Source: Budget Papers of the Central Government.

Note:- Budget Heads for Custom Duties have been changed from 1986-87, following the introduction of new custom tariff, hence no details.

PERCENTAGE SHARE OF CENTRAL EXCISE ON POL TO TOTAL CENTRAL EXCISE AND TO THE NATIONAL PRODUCTS.

Year	Net National Product at current prices (..... Rs. Crores.....)	Central Excise	Central Excise on POL	Central Excise as % of NNP	Central Excise on POL as % of NNP	Central Excise on POL as % of Total Central Excise
1.	2.	3.	4.	5.	6.	7.
1960-61	13263	416	101	3.1	0.8	24.3
1965-66	20637	898	261	4.4	1.3	29.1
1970-71	34235	1759	608	5.1	1.8	34.6
1971-72	36582	2061	708	5.6	1.9	34.4
1972-73	40317	2324	767	5.8	1.9	33.0
1973-74	50468	2602	874	5.2	1.7	33.6
1974-75	59505	3231	1011	5.4	1.7	31.3
1975-76	62302	3845	1040	6.2	1.7	27.1
1976-77	66924	4221	1110	6.3	1.7	26.3
1977-78	75706	4448	1152	5.9	1.5	25.9
1978-79	81321	5194	1290	6.4	1.6	24.0
1979-80	88813	6148	1407	6.9	1.6	22.9
1980-81@	110484	6500	1158	5.9	1.0	17.8
1981-82@	128457	7421	1294	5.8	1.0	17.4
1982-83@	141331	8059	1408	5.7	1.0	17.5
1983-84@	165818	10222	1430	6.2	0.9	14.0
1984-85@	184354	11151	1605	6.0	0.9	14.4
1985-86@	206491	13008	1845	6.3	0.9	14.2
1986-87@	228708	14489	2034	6.3.	0.9	14.0
1987-88(RE)	257913	16347	2199	6.3.	0.9.	13.5
1988-89(RE)	306822	18825	2406	6.1	0.8	12.8
1989-90	NA	22103	2660	NA	NA	12.0

(@) New Series Provisional

SOURCE : i) Government of India's Economic Survey for N.N.P.
ii) Budget papers of Central Government.

COMPOSITE INCIDENCE OF EXCISE AND CUSTOM DUTIES ON PETROLEUM PRODUCTS

Year	Consumption of POL Products (Excl. R.B.F. ('000'MTS)	Central Excise Duty realisation (Rs./Crores)	Customs Duties realisation (Rs./Crores)	Total Central Excise & Custom duties (Rs./Crores)	Composite Incidence of Excise & Customs duties (Rs./Crores)
1.	2.	3.	4.	5.	6.
1960-61	7985	101	23	124	155.29
1965-66	11917	261	83	344	288.66
1970-71	17912	608	30	638	356.19
1971-72	20071	709	63	772	384.63
1972-73	21715	767	86	853	392.82
1973-74	22346	874	96	970	434.08
1974-75	22105	1011	96	1106	500.34
1975-76	22447	1040	115	1155	514.55
1976-77	24101	1110	112	1222	507.03
1977-78	25539	1152	127	1279	500.80
1978-79	28241	1290	190	1480	524.06
1979-80	29883	1407	213	1620	542.10
1980-81	30896	1158	354	1512	489.38
1981-82	32523	1294	288	1582	486.42
1982-83	34657	1408	256	1664	480.13
1983-84	35841	1430	219	1649	460.1
1984-85	38795	1605	472	2077	535.4
1985-86	40872	1845	1050	2895	708.3
1986-87	43662	2034	1131	3165	724.9
1987-88	46416	2199	2220	4419	952.0
1988-89	50027	2406	2473	4879	975.3
1989-90 (P)	53825	2660	2823	5483	1018.7

(P) = Provisional

ROYALTY AND OIL DEVELOPMENT CESS PAID BY OIL COMPANIES ON PRODUCTION OF CRUDE OIL AND NATURAL GAS SINCE 1973-74 TO 1989-90

(Rs./Lakhs)

YEAR	ROYALTY PAID ON CRUDE OIL						ROYALTY PAID ON NATURAL GAS					OIL DEVELOPMENT CESS
	W.Region Gujarat	E.Region Assam	S.Region Tamil Nadu	Total On Shore	Bombay High Off Shore	Total	W.Region Gujarat	E.Region Assam	S.Region Tamil Nadu	B.High Off Shore	Total	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10	11.	12.	13.
1973-74	520	548	-	1068	-	1068	26	5	-	-	31	-
1974-75	576	584	-	1160	-	1160	36	8	-	-	44	3081
1975-76	615	645	-	1260	-	1260	43	26	-	-	69	5007
1976-77	1279	1087	-	2366	156	2522	44	59	-	-	103	5289
1977-78	1742	1907	-	3649	1016	4665	102	50	-	-	152	6375
1978-79	1771	1727	-	3498	1349	4847	88	66	-	-	154	6889
1979-80	1566	1771	-	3337	1761	5098	240	65	-	15	320	6970
1980-81	1578	531	-	2109	1997	4106	168	36	-	50	253	6040
1981-82	2075	3155	-	5230	4430	9660	184	69	-	258	511	13897
1982-83	1927	3498	-	5425	7513	12938	32	123	-	593	748	26884
1983-84	2179	3054	-	5233	10305	15538	305	108	-	911	1324	81279
1984-85	7449	9513	-	16962	11931	38893	183	114	-	2109	2406	84434
1985-86	13275	12433	-	25708	12155	37863	242	96	-	1905	2243	86629
1986-87	8590	9395	11	17996	91192	109188	359	95	-	4113	4567	98916
1987-88	9412	9833	26	19271	37724	56995	797	409	-	6594	7800	151331
1988-89	10175	10281	59	20525	39660	60185	1083	405	16	8557	10061	201364
1989-90(P)	11540	10794	360	22694	40118	62812	1187	429	34	10409	12059	291457

NOTE:1) Figures for 1984-85 & 1985-86 have undergone revision due to increase in Royalty rate from Rs.61/ pmt to 192/- pmt.

2) Figures of Royalty in 1987-88 include payments for 1986-87 and advance payments made for 1988-89. While some payments for 1987-88 has made by ONGC in 1988-89. These figures also include royalty on condonsate and NGL.

(P) Provisional.

EXCISE DUTY ELEMENT INCLUDED IN SELLING PRICES OF BULK REFINED PETROLEUM PRODUCTS
(EX-STORAGE POINT)

(Rupees/Selling Unit)

PRODUCTS	Selling Unit	w.e.f. 1.3.79	w.e.f. 17.8.79	w.e.f. 11.9.79	w.e.f. 8.6.80	w.e.f. 13.1.81	w.e.f. 11.7.81	w.e.f. 15.2.83	w.e.f. 1.4.83	w.e.f. 1.9.83	w.e.f. 1.4.84/ 1.4.85/ 1.4.86/ 1.4.87/ 1.3.88/	w.e.f. 1.3.88 No Change upto 20.3.1990.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1 Av.gas 100/130	KL	2702.43	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89	2214.89
2 Av. gasl15/145	KL	2700.50	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32	2213.32
3 Av.gas 73	KL	2701.60	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2214.21	2326.79
4 M.S. 87 @@	KL	2703.25	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2215.56	2327.50
5 M.S. 93	KL	2704.90	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2216.92	2328.92
6 A.T.F.	KL	493.10	402.56	402.56	333.52@	333.52	333.52	333.52	333.52	333.52	333.52	352.07
7 S.K.O.	KL	493.20	402.63	333.59	333.59@	333.59	333.59	333.59	333.59	333.59	333.59	330.44
8 H.S.D.O.	KL	493.95	399.15	330.00	330.00@	330.00	330.00	330.00	330.00	330.00	330.00	347.49
9 L.D.O.	KL	74.15	153.96	153.96	153.96	153.96	153.96	153.96	153.96	153.96	153.96	160.91
10 F.O.(Fert. Use)*	KL	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	*
11 F.O.(Non-Ferts Use)	KL	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	125.82	150.71
12 Bitumen (Bulk)	MT	157.55	110.30	110.30	110.30	110.30	110.30	110.30	110.30	110.30	110.30	115.50
13 Bitumen (Packed)	MT	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55	157.55	168.00
14 LPG(Domes. Packed)	MT	400.00	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	273.00
15 LPG (Indust.)Bulk	MT	400.00	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	262.50	273.00
16 Naphtha*(Fert.Use)	KL	4.50	4.50	4.36	4.36	4.36	4.36	-	-	4.40	4.40	4.00
17 Naphtha*(For Non-Fert. Use)	KL	26.50	26.50	26.50	26.50	26.50	26.50	-	-	26.25	26.25	26.25

* Duty at applicable rates will be charged ** w.e.f. 1.10.1986.
@@ MS 83 was replaced by MS 87 w.e.f. 1.9.1983.
@ Revision effective from 11.9.1979.

Note: i) No Custom/Excise Duty is chargeable on FO when used as feed stock, the duty @ Rs. 63.46/KL only is chargeable when used in fertilizer industry for purposes other than feed stock.
ii) w.e.f. 1.10.1986, the supply of FO/Naphtha to fertilizers units for purposes other than feedstock will be charged at the rate applicable to General Category.

EXCISE AND CUSTOM DUTIES IN THE BASIC CEILING SELLING PRICES (BCSP) OF POL PRODUCTS EX-STORAGE POINT EFFECTIVE FROM 20.3.1990

(Rs./Selling Unit)

PRODUCT	Selling Unit	Price Ex-Storage Point (Bombay) (Rs.) @	Excise/Custom Duties (Rs.)	Col.4 as % of Col.3
1.	2.	3.	4.	5.
AV Gas	KL	7595.34	2326.79	30.6
A.T.F.	KL	6560.30	352.07	5.4
Motor Spirit 87	KL	8944.07	2327.50	26.0
Motor Spirit 93	KL	10944.07	2328.92	21.3
H.S.D.O.	KL	3633.53	347.49	9.6
S.K.O.	KL	1956.93	330.44	16.9
L.D.O.	KL	3053.97	160.91	5.3
F.O. (Non-Fertilizers)	KL	2903.06	150.71	5.2
F.O. (Fertilizers) *	KL	1320.24	--	--
Bitumen St.Grade (Bulk)	MT	2524.85	115.50	4.6
Bitumen St.Grade (Packed)	MT	3099.91	168.00	5.4
Naphtha for non-Ferts.*	MT	3211.00		
Naphtha for Ferts.*	MT	1982.31		
J.B.O. *	MT	2712.42		
SBP Spirit 55/115*	KL	3972.56		
SBP Spirit 64/69*	KL	4173.36		
Solvent 1425*	KL	3972.56		
Hexane*	KL	4173.36		
M.T.O. 140/205*	KL	2700.26		
M.T.O. (Laws)*	KL	2793.96		
L.P.G.(Domestic Packed)	MT	3448.98	273.00	7.9
L.P.G.(Industrial) (Bulk Essential)	MT	5001.10	273.00	5.5
L.P.G. Industrial Bulk Non-Essential	MT	6151.39	273.00	4.4

* = Prices shown against these products are exclusive of Custom/ Excise duties chargeable extra at applicable rates.

@ = Based on the Basic ceiling selling prices for all refinery points (Primary pricing points) applicable as at Bombay w.e.f. 6.2.1986.

Note: Effective 1.10.1986, the supply of FO/Naphtha to fertilisers units for purposes other than feedstock will be charged at the rates applicable to general category.

*SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS AS ON 1.4.1990

SNo.	Products	**Andhra Pradesh	Assam	Bihar	Chandi-garh	Delhi	Goa	Gujarat
1.	Aviation Spirit	27.31%	25%	25%	15 PPL	7%	12%	Bonded 30% & duty paid 9%
2.	Aviation Turbine Fuel (ATF)	27.31%	25%	25%	15 PPL	7%	12%	Bonded 30% duty paid 23%
3.	Motor Spirit	27.31%	12%	9%	15 PPL	7%	12%	20%
4.	H.S.D.	17.44%	11%	14%	10 PPL	7%	12%	18%
5.	L.D.O.	17.44%	11%	14%	7%	7%	12%	7%
6.	M.L.O.	17.44%	8%	9%	7%	7%	6%	10%
7.	S.K.O.	6.44%	2%	6%	7%	3%	Exempt	3%
8.	I.K.O.	6.44%	2%	5%	7%	3%	Exempt	3%
9.	F.O.	6.44%	8%	8%	7%	7%	12%	7%
10.	M.T.O.	6.44%	8%	9%	7%	7%	6%	10%
11.	Lubes	14.48% (10.00%)	10%	9%	7%	7%	6%	12%
12.	Greases	14.48%	10%	9%	7%	7%	6%	12%
13.	Petroleum Naphtha	14.48%	8%	9%	7%	7%	12%	12%
14.	Bitumen	14.48%	8%	9%	7%	7%	6%	10%
15.	Petroleum Coke	4.00% (4.00%)	4%	4%	-	4%	4%	4%
16.	Indane (LPG)	14.48%	8%	9%	7%	5%	6%+	12%+4% CST
17.	Transformer Oil	6.44%	8%	9%	7%	7%	6%	10%
18.	H.B. Fluid	14.48%	10%	9%	7%	7%	6%	12%
19.	Crude Oil	4.00%	4%	4%	-	4%	-	4%
19A.	Natural Gas	14.48%	8%	-	-	-	-	16%+20% SC
20.	L.S.H.S.	6.44%	8%	9%	7%	7%	6%	12%

\+ LPG for household purpose is exempted.

** These rates are inclusive of :

1. Turnover Tax @ 1.5% on taxable Turnover.
2. Surcharge @ 10% on Sales Tax.

*SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS AS ON 1.4.1990

SNo.	Products	Haryana	Himachal Pradesh	J & K	Kerala	Madhya Pradesh	Maharashtra	Karnataka
1.	Aviation Spirit	6%	5%	8%	10%	14%	Duty paid 9%	19%
2.	Aviation Turbine Fuel (ATF)	6%	5%	8%	10%	14%	Bonded 30% Duty Paid 23%	19%
3.	Motor Spirit	6%	5%	4%	15%	16%	17%	19%
4.	H.S.D.	6%	5%	8%	20%	16%	14%	19%
5.	L.D.O.	8%	7%	8%	20%	16%	8%	19%
6.	M.L.O.	8%	7%	8%	10%	14%	8%	7%
7.	S.K.O.	8%	7%	Exempted	4%	3%	Exempted	5%
8.	I.K.O.	8%	7%	Exempted	4%	3%	Exempted	5%
9.	F.O.	8%	7%	8%	10%	14%	8%	13%
10.	M.T.O.	8%	7%	8%	-	14%	8%	-
11.	Lubes	8%	7%	8%	12%	12%	8%	15%
12.	Greases	8%	7%	8%	12%	12%	8%	15%
13.	Petroleum Naphtha	8%	7%	8%	5%	14%	8%	10%
14.	Bitumen	8%	7%	5%	8%	14%	8%	10%
15.	Petroleum Coke	4%	4%	-	4%	4%	4%	4%
16.	Indane (LPG)	8%	7%	8%	15%	14%	4%@	15%
17.	Transformer Oil	8%	7%	8%	12%	14%	8%	13%
18.	H.B. Fluid	8%	7%	8%	12%	12%	10%	10%
19.	Crude Oil	4%	4%	-	4%	4%	4%	4%
19A.	Natural Gas	-	-	-	-	-	8% @@	-
20.	L.S.H.S.	-	7%	8%	8%	14%	8%	7%

@ For LPG Cylinders below 15 Kgs. For Cylinders above 15 Kg. 8%

@@ 6% ST is payable in case of supplies to electricity companies. Additional Sales Tax of 12% on sales tax is required to borne by the Supplier.

*SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS AS ON 1.4.1990

SNo.	Products	Meghalaya	Mizoram	Manipur	Nagaland	Orissa
1.	Aviation Spirit	-	-	10%	-	13%
2.	A.T.F.	-	-	10%	-	10%
3.	Motor Spirit	26+2.6% SC	10 PPL	30 PPL	30 PPL	10%
4.	H.S.D.	11PPL+ 1.10% SC	8 PPL	25 PPL	9 PPL	13%
5.	L.D.O.	-	-	25 PPL	-	13%
6.	M.L.O.	-	-	6%	-	7%
7.	S.K.O.	3 PPL	-	3%	3 PPL	8%
8.	I.K.O.	-	-	3%	-	Exempt
9.	F.O.	-	-	6%	-	8%
10.	M.T.O.	-	-	6%	-	7%
11.	Lubes	10PPL +1% SC	15 PPL	25 PPL	11 PPL	12%
12.	Greases	-	15 PPL	25 PPL	50 PPKg	12%
13.	Petroleum Naphtha	-	-	6%	-	7%
14.	Bitumen	-	-	6%	-	7%
15.	Petroleum Coke	-	-	4%	-	4%
16.	Indane (LPG)	-	-	6%	-	6%
17.	Transformer Oil	-	-	-	-	-
18.	H.B. Fluid	-	-	-	-	-
19.	Crude Oil	-	-	5 PPL	3%	4%
19A.	Natural Gas	7%+1%SC	-	6%	NA	-
20.	L.S.H.S.	-	-	-	-	-

PPKg.: Paise per Kg
PPL : Paise per litre.

*SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS AS ON 1.4.1990

SNo.	Products	@ Punjab:	Rajasthan:	Tripura:	Tamil Nadu:	U.Pradesh:	W.Bengal
1.	Aviation Spirit	7%	10%	12%	20%	10%	9%
2.	Aviation Turbine Fuel (ATF)	8.8%	10%	12%	20%	10%	25%
3.	Motor Spirit	7%	18%	8%	18%	10%	10%
4.	H.S.D.	4%	16%	5%	14%	12%	12%
5.	L.D.O.	8.8%	16%	5%	14%	12%	12%
6.	M.L.O.	8.8%	10%	-	10%	8%	8%
7.	S.K.O.	8.8%	10%	5%	4%	8%	5%
8.	I.K.O.	8.8%	10%	4%	4%	8%	Exempted
9.	F.O.	8.8%	10%	5%	10%	5%	8%
10.	M.T.O.	8.8%	10%	-	10%	12%	8%
11.	Lubes	8.8%	10%	12%	10%	8%	11%
12.	Greases	8.8%	10%	12%	10%	8%	11%
13.	Petroleum Naphtha	8.8%	10%	-	10%	8%	8%
14.	Bitumen	8.8%	10%	-	8%	8%	8%
15.	Petroleum Coke	4%	4%	4%	4%	4%	4%
16.	Indane (LPG)	8.8%	10%	12% 12%	8%	8%	15%
17.	Transformer Oil	8.8%	10%	-	4%	8%	8%
18.	H.B. Fluid	8.8%	10%	-	8%	8%	11%
19.	Crude Oil	4%	4%	-	4%	4%	4%
19A.	Natural Gas	-	-	-	12%	-	-
20.	L.S.H.S.	8.8%	-	-	10%	5%	8%

@ Rates are inclusive of additional tax @ 10% on tax wherever applicable.

IN ADDITION TO THE SALES TAX PAYABLE THE FOLLOWING TAX AMOUNTS ARE ALSO PAYABLE/RECOVERABLE

1.	Haryana:	Surcharge at 10% on Sales Tax on all products. This is recoverable from the customers.
2.	Punjab:	Additional tax at 10% of the Sales Tax on products under General Sales Tax Act is payable. This is recoverable from the customers. (Not payable on MS, Av.Spirit & HSD)
3.	West Bengal :	Turnover Tax @ 1.5% of the gross turnover of the bill is payable, but same is not recoverable from the customer.
4.	Kerala :	1. Surcharge at 8% of Sales Tax is payable, but not recoverable from the customers. 2. 1.5% Turnover Tax is payable but not recoverable from the customers. 3. Addl. Sales Tax @ 25% of Sales Tax is payable. This is recoverable from the customers.
5.	J & K :	Surcharge @ 5% of Sales Tax is payable. This is recoverable from the customers. This does not apply to products falling under Motor Spirit Tax Act (i.e. Motor Spirit & HSD).
6.	Maha-rashtra:	1. Addl.Sales Tax @ 12% on Sales Tax is payable but the same is not recoverable from customers. This is not payable on Kerosene declared goods, ATF/Av. Spirit, MS and HSD. 2. Turnover tax @1.25% is payable but not recoverable from the customers.
7.	Karna-taka :	1.25% Turnover Tax on the turnover between Rs.5 lakhs and Rs.250 lakhs and 1.75% if turnover is above Rs.250 lakhs. This is payable but same is not recoverable from the customers.
8.	Tamil Nadu :	1. Surcharge : (a) In the Municipal Corporation of Madras 15% (b) Municipal Corporation of Madurai, Coimbatore or in any other Special Grade Municipalities 12% (c) In the following areas 10%. (i) Municipalities of selection grade-I,II or III and in the Municipalities or any specified areas therein declared to be township. (ii) In villages declared to be panchayat Town, Village, town or any part thereof declared to be township. (iii) Town Ship constituted under the Mettur, Courtallan or Bhavanisagar Township Acts. (d) All other areas 8%. 2. (i) Addl. Turnover Tax @ 2% on taxable turnover between Rs.1 crore and Rs.5 crores. (ii) 2.25% on taxable turnover between Rs.5 crores and Rs.10 crores. (iii) 2.5% on Taxable turnover if taxable turnover is above Rs.10 crores. This is payable but not recoverable from the customers.
9.	Gujarat:	1. Addl.Sales Tax at 20% on Sales Tax. This is recoverable from the customer. This is not payable on MS, HSD, ATF & Avn.Spirit. 2. Turnover tax @ 1.50% (on taxable turnover above Rs.5 crores) is payable but not recoverable from the customers.
10.	Orissa :	Addl. Sales Tax at 1% of Invoice value is payable on all products. This is recoverable from the customers.
11.	Goa :	Additional Sales Tax @ 10% of Sales Tax is payable but same is not recoverable from the customers.
12.	Andhra Pradesh:	1. Turnover Tax @ 1.5% on taxable turnover. This is recoverable from the customers. 2. Surcharge @ 10% on tax is payable. This is recoverable from the customers.
13.	Bihar:	1. 10% Surcharge on Sales Tax is payable but not recoverable from the customers. 2. 1% Addl.Tax on gross turnover is payable. This is recoverable from the customers.
14.	Himachal Pradesh:	10% surcharge on Sales Tax is payable. This is recoverable from the customer (This surcharge is not applicable on MS, ATF/Avn.Spirit and HSD sales.
15.	Uttar Pradesh :	10% Additional tax on Sales Tax.This is recoverable from the customers.

SALES TAX PAYMENTS (INCLUSIVE OF MST AND CST) ON CRUDE OIL/CONDENSATES, NATURAL GAS & PETROLEUM PRODUCTS MADE BY THE OIL COMPANIES TO STATE/UNION TERRITORY GOVERNMENTS DURING THE YEAR 1980-81 TO 1989-90.

(Rs.in lakhs)

S T A T E	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90
1. Crude Oil						
Assam	193	2550	3456	3407	3537	4290
Gujarat	476	2248	2965	3334	3627	4731
Arunachal Pradesh	1	32	40	21	22	30
Nagaland	-	31	54	45	71	83
Maharashtra	-	6965	9220	10924	6835	7428
Tamil Nadu	-	-	3	9	20	152
Total (1)	670	11826	15738	17741	14112	16714
2. Natural Gas						
Assam	56	114	48	366	326	422
Gujarat	214	341	347	4052	7280	11199
Maharashtra* (Bombay High)	-	1356	4046	4537	4319	6204
Arunachal Pradesh	-	-	-	Neg.	17	48
Tamil Nadu	-	-	-	Neg.	3	6
Tripura	-	-	3	15	18	17
Total (2)	270	1811	4444	8970	11963	17895
3. POL Products						
(a) States						
Andhra Pradesh	4727	10758	12764	13597	14883	22318
Assam	798	2688	2463	3350	3519	4509
Bihar	2992	7078	7936	7328	8334	10326
Gujarat	7254	15042	19045	21030	26328	34430
Haryana	678	2026	2341	2251	2557	3764
Himachal Pradesh	20	81	341	179	186	181
Jammu & Kashmir	264	483	571	542	570	686
Karnataka	4034	10531	12311	11439	12256	16748
Kerala	4854	10737	13543	11642	14304	8617
Madhya Pradesh	2760	5061	6468	5488	7040	10160
Maharashtra	9342	18762	24447	20556	24245	37124
Manipur	29	44	81	163	179	183
Meghalaya	1	Neg.	Neg.	1	1	1
Mizoram	-	-	1	15	18	20
Nagaland	Neg.	Neg.	1	13	37	68
Orissa	748	1781	2032	1559	1931	2915
Punjab	1220	2345	3410	3474	3615	5152
Rajasthan	2244	5768	6332	5624	7592	11681
Tamil Nadu	8407	19766	21818	19083	21673	31130
Tripura	38	107	115	203	256	287
Uttar Pradesh	4637	13373	15269	16334	17680	22682
West Bengal	4366	10883	11322	10447	11524	16624
Goa	558	1507	1717	1568	1373	2005
(b) Union Territories						
Chandigarh	34	28	39	41	67	61
Delhi	1859	3923	4259	4420	4497	6160
Pondicheri/Mane	-	-	-	17	20	--
Total (3)	61864	142772	168626	160364	184685	247832
GRAND TOTAL	62804	156409	188808	187075	210760	282441

* Central Govt. Source: Compiled from Receipts of Individual companies.

XV. TRANSPORTATION

Tonnage of Indian Tankers Fleet (DWT in '000')

	COASTAL OIL TANKER				TOTAL		OFFSHORE SUPPLY VESSELS/				OVERSEAS						OVERSEAS		TOTAL ALL	
	PRODUCT CARRIERS		CRUDE OIL CARRIERS		COASTAL OIL TANKER		SPECIALISED VESSELS FOR OFFSHORE		TOTAL		ORE OIL BULK		CRUDE CARRIERS		PRODUCT CARRIERS		(TOTAL)		TANKER	
Year *	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT	No.of Tanker	DWT
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.
1975	-	-	-	-	9	137.6	-	-	-	-	-	-	-	-	-	-	31	2420.0	40	2557.6
1976@	-	-	-	-	9	137.6	-	-	-	-	-	-	-	-	-	-	36	3078.0	45	3215.6
1977@	-	-	-	-	9	137.2	-	-	-	-	-	-	-	-	-	-	37	3108.9	46	3246.1
1978@	-	-	-	-	8	126.8	-	-	-	-	-	-	-	-	-	-	40	3444.5	48	3571.3
1979@	-	-	-	-	9	132.9	-	-	-	-	-	-	-	-	-	-	39	3424.0	48	3556.9
1980@	-	-	-	-	10	158.5	-	-	-	-	-	-	-	-	-	-	38	3335.3	48	3493.8
1981@	-	-	-	-	16	247.7	-	-	-	-	-	-	-	-	-	-	39	3364.0	55	3611.7
1982@	-	-	-	-	18	300.6	-	-	-	-	-	-	-	-	-	-	42	3518.8	60	3819.4
1983@	-	-	-	-	18	300.6	-	-	-	-	-	-	-	-	-	-	41	3482.1	59	3782.7
1984@	-	-	-	-	18	300.6	-	-	-	-	-	-	-	-	-	-	49	3976.6	67	4277.2
1985	-	-	-	-	18	300.1	-	-	-	-	-	-	-	-	-	-	48	3807.0	66	4113.1
1986	-	-	-	-	18	306.1	-	-	-	-	-	-	-	-	-	-	48	3592.9	66	3899.0
1987	-	-	-	-	18	306.1	-	-	-	-	-	-	-	-	-	-	48	3592.9	66	3899.0
1988	-	-	-	-	18	306.1	-	-	-	-	-	-	-	-	-	-	51	3557.6	69	3863.7
1989**	13	185	2	82	15	267.9	82	122.8	82	122.8	9	988.9	22	2121.2	25	575.5	56	3685.6	153	4076.3
1990	13	186	2	82	15	267.8	87	140.2	87	140.2	9	990.5	22	2121.2	25	601.5	56	3713.2	158	4121.2

* As on 31st December of each year. @ DWT in Metric Tonnes

** DWT in MT as on 31.3.1989

Source: Ministry of Transport

INDIAN TANKER FLEET OFFSHORE SUPPLY VESSELS AS ON 31.3.1989.

COASTAL OIL TANKERS

(PRODUCT/CRUDE OIL CARRIERS)

TANKERS (Product Carriers)

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
A. The Shipping Corpn. of India Ltd. Bombay			
1. m.t. Visvesvaraya	1973	11094	16450
2. m.t. Bhagat Singh	1974	10759	16540
3. m.t. Sarojini Naidu	1975	10759	16440
4. m.t. Rafi Ahmed Kidwai	1975	15035	24439
5. m.t. Jai Narayan Vyas	1975	15035	24529
		62682	98398
B. M/s. Varun Shipping Co. Ltd. Bombay			
6. m.t. Vayudoot	1980	3924	7012
C. M/s. Essar Shipping Ltd., Bombay			
7. m.t. Nand Kala	1972	3827	6700
8. m.t. Nand Kishore	1981	13906	19600
9. m.t. Nand Hari	1981	11135	19600
10. m.t. Nand Kavita	1970	15098	25600
		43966	71500
D. M/s. Sagar Lines (India) Pvt.Ltd., Calcutta			
11. m.t. Sagar Tarani	1965	497	712
E. M/s Seatrans Shipping Co., Bombay			
12. m.t. Raj Sevak	1966	750	1356
F. The Shipping Credit & Inv. Co.of India Ltd. Bombay.			
13. m.t. Nand Smi	1982	4275	6600
To 13 Vessels		116094	185578

TANKERS (CRUDE OIL CARRIERS)

A. The Shipping Corpn of India Ltd., Bombay			
1. m.t. C.V. Raman	1981	27484	41123
2. m.t. Homi Bhabh	1982	27489	41126
Total Vessels		54973	82249

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
OFFSHORE SUPPLY VESSELS			
A. M/s.Garware Shipping Corpn.Ltd., Bombay			
1. m.v. Garware-I	1983	881	1050
2. m.v. Garware-II	1983	881	1050
3. m.v. Garware-III	1984	881	1050
4. m.v. Garware-IV	1984	881	1050
5. m.v. Garware-V	1984	881	1050
		4405	5250
B. The Great Eastern Shipping Co. Ltd.,Bombay			
6. m.v. Malaviya One	1983	869	1073
7. m.v. Malaviya Two	1983	870	1084
8. m.v. Malaviya Three	1984	1084	1251
9. m.v. Malaviya Four	1984	1085	1242
		3908	4650
C. M/s.Essar Shipping Ltd. Bombay			
10. m.v. Nand Godavari	1984	1313	1750
11. m.v. Nand Panna	1984	1313	1750
12. m.v. Nand Krishna	1984	1313	1750
13. m.v. Nand Heera	1984	1313	1750
14. m.v. Nand Ratna	1969	487	737
15. m.v. Nand Cauvery	1984	1299	1868
		7038	9605
D. M/s.Hede Ferrominas Pvt.Ltd. Goa.			
16. m.v. Ferromina Harvest	1971	629	759
E. M/s.Varun Shipping Co.Ltd., Bombay.			
17. m.v. Neel Kamal	1983	999	
18. m.v. Neel Akash	1984	999	1084
		1998	1086
			2170
F. The Shipping Corpn.of India.Ltd., Bombay.			
19. m.v. Feroze Gandhi	1984	1310	
20. m.v. C.P.Srivastava	1984	1310	1391
21. m.v. SCI-01	1984	1310	1406
22. m.v. SCI-02	1984	1310	1408
23. m.v. SCI-03	1984	1310	1410
24. m.v. SCI-04	1984	1310	1404
25. m.v. SCI-05	1984	1310	1445
26. m.v. SCI-06	1984	1310	1452
27. m.v. Capt. F.V.Juvale (Ex-SCI-07)	1985	1310	1451
28. m.v. Dr.Nagendra Singh	1985	1310	1442
		13100	1450
			14259

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
G. The Oil & Natural Gas Commission, Bombay.			
29. m.v. Sindhu-01	1984	1310	1450
30. m.v. Sindhu-02	1985	1310	1450
31. m.v. Sindhu-03	1985	1310	1450
32. m.v. Sindhu-04	1986	1310	1450
33. m.v. Sindhu-06	1985	1302	1457
34. m.v. Sindhu-07	1985	1302	1400
35. m.v. Sindhu-08	1985	1302	1400
36. m.v. Sindhu-09	1985	1302	1400
37. m.v. Sindhu-10	1985	1302	1400
38. m.v. Sindhu-11	1985	1302	1400
39. m.v. Sindhu-14	1987	1323	1450
40. m.v. Samudrika - 01	1986	949	950
41. m.v. Samudrika - 02	1986	949	950
42. m.v. Samudrika - 03	1986	949	950
43. m.v. Samudrika - 05	1986	951	1240
44. m.v. Samudrika - 06	1986	949	950
45. m.v. Samudrika - 07	1987	949	950
46. m.v. Samudrika - 08	1986	949	950
47. m.v. Samudrika - 09	1986	949	950
48. m.v. Samudrika - 10	1986	949	950
49. m.v. Samudrika - 11	1986	949	950
50. m.v. Samudrika - 12	1986	949	950
51. m.v. Samudrika - 14	1985	954	950
52. m.v. Samudrika - 15	1985	954	950
53. m.v. Samudrika - 16	1985	954	950
54. m.v. Samudrika - 17	1985	954	950
55. m.v. Samudrika - 18	1985	954	950
56. m.v. Sagarika - 01	1976	736	818
57. m.v. Sagarika - 02	1976	671	933
		30993	32948
Total 57 Vessels		62071	69641
SPECIALISED VESSELS FOR OFFSHORE SERVICES			
A. M/s.Essar Shipping Ltd. Bombay.			
1. m.v. Nand Rachit (DSV)	1980	1548	1200
2. m.v. Nand Rewant (MSV)	1984	3966	2067
3. m.v. Nand Shamik (MSV)	1982	3963	2067
4. m.v. Essar Discoverer (Drillship)	1977	5971	5326
5. m.v. Essar Stona-I (DSV) Ex.Dynamic Constructor	1981	4495	2965
		19943	13625

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
B. M/s.Underwater Services Co.Pvt.Ltd. Bombay.			
6. m.v. Ocean Pearl (SBSM)	1966	482	670
C. M/s.Oil & Natural Gas Commission, Bombay.			
7. m.v. Samudra Nidhi (WSV)	1985	2995	2189
8. m.v. Samudra Sarvekshak (NDT)	1986	3444	552
9. m.v. Samudra Prabha (NDT)	1986	4018	2124
10. m.v. Sagar Sandhan (Research)	1986	1500	2145
11. m.v. Anweshak	1974	715	1469
12. m.v. Sagar Vijay (Drillship)	1985	11103	9239
13. m.v. Samudra Suraksha (Drillship)	1982	5006	4348
14. m.v. Sagar Bhushan (Drillship)	1987	11103	9239
15. m.v. Sagarika-IV (Survey Launch)	1983	4207	1096
16. m.v. Sagar Samrat	1973	4186	6398
		48277	38799
D. M/s.Bombay Offshore Supplies & Services, Bombay.			
17. m.v. BOSS-1 (AHT)	1982	491	516
18. m.v. Bossvishwa (D/S)	1981	11625	8141
		12116	8657
E. M/s.Aditi Shipping Co., Bombay.			
19. m.v. Adishakti (Tug)	1976	457	279
F. M/s.South India Corpn.(Agencies)Ltd.Madras			
20. m.v. Sagar Sevak (Utility Boat)	1972	490	860
G. The Director General of Lighthouses & Lightships			
21. m.v. Paradeep (Steel/Buoy Tender)	1984	602	162
22. m.v. Sagar Deep (L.H.Tender)	1963	2775	1568
		3377	1730
H. The Geological Survey of India.			
23. m.v. Samudra Manthan (Research)	1958	2374	1825
24. m.v. Samudra Kaustubh (Research)	1985	284	94
25. m.v. Samudra Saudhikama (Survey Vessel)	1985	284	94
		2942	2013
I. The Council of Scientific & Industrial Research			
26. m.v. Gaveshani (Research)	1964	1634	873
27. m.v. Sagar Sampada (Research)	1984	2661	800
		4295	1673
J. M/s.Goa Diving & Salvage Co.Pvt.Ltd.			
28. m.v. Malacca (Tug)	1963	167	210
29. m.v. Orinoco (Tug)	1964	617	NA
		784	210
K. M/s.Pearless Drive			
30. DSV Drive Ocean (Ex.British Providence)	1983	1563	2000
Total 30 Vessels		94716	70516

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
OVERSEAS			
ORE OIL BULK CARRIERS			
The Shipping Corpn.of India.Ltd. Bombay.			
1. m.v. Vallabhai Patel	1977	62563	113926
2. m.v. Vallathol	1976	62563	114152
3. m.v. Maharshi Dayanand	1978	66926	123450
4. m.v. Maharshi Karve	1978	66926	123450
		258978	474978
The Great Eastern Shipping Co.Ltd. Bombay.			
5. m.v. Jag Laadki	1972	55540	101500
6. m.v. Jag Laxmi	1976	66723	122146
7. m.v. Jag Leela	1976	66723	122146
		188986	345792
The Shipping Credit & Investment Co.of India Ltd., Bombay.			
8. m.v. Jag Lata	1973	57793	104754
9. m.v. Nand Shivchand	1982	37813	65000
Total 9 Vessels		543570	990524
Oil Tankers (Crude Carriers)			
The Shipping Corpn.of India Ltd., Bombay.			
1. m.t. Subedar Joginder Singh PVC	1984	37855	67137
2. m.t. Major Dhan Singh Thapa PVC	1984	37855	67153
3. m.t. Naik Jadunath Singh PVC	1984	37855	67162
4. m.t. Company Havildar Major Piru S.PVC	1984	37855	67161
5. m.t. Capt.Gurubachan Singh Salaria PVC	1984	37855	67167
6. m.t. Lance Naik Karam Singh PVC	1984	37855	67185
7. m.t. Major Saitan Singh PVC	1985	37855	67185
8. m.t. Major Somnath Sharma PVC	1984	37855	67225

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
9. m.t. Havildar Abdul Hamid PVC	1985	37855	67164
10. m.t. Col.Ardeshr Burzorji Tarapore PVC	1985	37855	67124
11. m.t. Lt.Rama Raghoba Rane, PVC	1984	37855	67227
12. m.t. Vivekananda	1974	51717	89371
13. m.t. Satyamurthi	1975	51533	89351
14. m.t. Netaji Subhas Bose	1973	51526	89392
15. m.t. Lok Manya Tilak	1975	51535	89411
16. m.t. B.R.Ambedkar	1974	51718	89454
17. m.t. Chattrapati Shivaji	1974	51718	89490
18. m.t. Rajendra Prasad	1975	63460	115723
19. m.t. Zakir Hussain	1975	63460	115853
20. m.t. Kanchanjunga	1975	139820	276755
21. m.t. Koyali	1976	139820	276800
		1132712	2060490
M/s.Ratnakar Shipping Co.Ltd., Calcutta.			
22. m.t. Ratna Abha	1982	40613	60725
Total 22 Vessels		1173325	2121215
OIL TANKERS (PRODUCT CARRIERS)			
The Shipping Corpn.of India Ltd., Bombay.			
1. m.t. Dadabhai Nauroji	1977	15045	24469
2. m.t. Aurobindo	1976	15045	24411
3. m.t. Kolandia	1976	15045	24490
4. m.t. Major Hoshiar Singh PVC	1985	28704	45421
5. m.t. Lance Naik Albert Ekka PVC	1985	28704	45473
6. m.t. Flying Officer Nirmal Jit Singh Shekhawat PVC	1985	28704	45485
7. m.t. Lt.Arun Khetarpal	1985	28704	45453
		159951	255202
The Great Eastern Shipping Co.Ltd., Bombay.			
8. m.t. Jag Prakash	1974	15849	25080
9. m.t. Jag Palak	1985	18542	26970
10. m.t. Jag Preeti	1981	21206	28679
11. m.t. Jag Pari	1982	20991	28679
12. m.t. Jag Priya	1975	20415	32360
13. m.t. Jag Prabhat	1985	18542	26967
14. m.t. Jag Pragati	1985	18542	26970
15. m.t. Jag Prabhu	1978	4357	7261
		138444	202966

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
M/s.Varun Shipping Co.Ltd., Bombay.			
16. m.t. Vijaydoot	1984	4462	7313
17. m.t. Vishwadoot	1982	18959	29999
18. m.t. Hansdoot	1983	4462	7344
19. m.t. Shaktidoot	1982	17751	29999
		45634	74655
M/s.Essar Shipping Ltd., Bombay.			
20. m.t. Nand Ekta	1982	4309	6603
M/s.Century Shipping. Bombay.			
21. m.t. Aditya Vikram	1981	3850	7070
22. m.t. Aditya Vardhan	1983	4749	7985
23. m.t. Aditya Vaibhav	1983	6481	10885
24. m.t. Aditya Vijay	1981	16899	29990
		31979	55930
M/s.Continental Shipping Corpn.Ltd., Bombay.			
25. m.t. Continental Bose (Ex.Sunny Crane)	1984	3462	6157
Total 25 Vessels		383779	601513

SHARE OF TRAFFIC IN PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS DURING 1969-70 TO 1989-90.

(Million Tonnes)

Name of the Port	Year	Total Traffic	POL traffic	POL as %age of total traffic at the port.
1.	2.	3.	4.	5.
Calcutta/Haldia*	1969-70	6.89	1.53	22.5
	1979-80	8.56	4.58	53.5
	1981-82	9.75	4.55	46.7
	1982-83	10.5	4.59	43.7
	1983-84	10.28	4.75	46.2
	1984-85	10.19	5.02	49.3
	1985-86	12.13	6.06	50.0
	1986-87	12.07	5.91	49.0
	1987-88	13.07	6.19	47.7
	1988-89	14.22	6.47	45.5
	1989-90	14.69	6.44	43.8
Bombay	1969-70	15.04	8.60	57.2
	1979-80	16.57	7.84	47.3
	1981-82	19.63	10.37	52.8
	1982-83	24.85	16.91	68.0
	1983-84	24.74	16.65	67.3
	1984-85	25.20	16.93	67.2
	1985-86	24.26	15.47	63.8
	1986-87	25.06	15.52	61.0
	1987-88	28.65	19.01	66.3
	1988-89	28.70	18.41	64.2
	1989-90	27.47	17.57	64.0
Madras	1969-70	6.44	2.24	34.8
	1979-80	9.99	3.73	37.3
	1981-82	11.41	4.59	40.2
	1982-83	12.41	5.81	46.8
	1983-84	13.32	6.58	49.4
	1984-85	15.01	6.93	46.2
	1985-86	18.15	8.93	49.2
	1986-87	19.78	10.31	52.1
	1987-88	22.02	12.23	53.6
	1988-89	23.86	10.76	45.1
	1989-90	23.94	9.75	40.7
Cochin	1969-70	4.79	3.56	74.3
	1979-80	5.47	3.87	70.8
	1981-82	5.51	4.18	75.9
	1982-83	5.72	4.33	75.7
	1983-84	5.13	3.80	74.1
	1984-85	3.92	2.63	67.1
	1985-86	5.11	3.83	75.0
	1986-87	6.88	5.45	79.2
	1987-88	6.80	5.37	79.0
	1988-89	7.82	6.27	80.2
	1989-90	7.11	5.56	78.2
Kandla	1969-70	2.11	0.98	46.4
	1979-80	7.27	5.45	75.0
	1981-82	9.53	7.16	75.1
	1982-83	12.65	10.74	84.9
	1983-84	14.16	11.36	80.2
	1984-85	15.75	11.94	75.8
	1985-86	16.49	12.34	74.9
	1986-87	16.19	11.93	74.9
	1987-88	18.08	13.09	72.4
	1988-89	17.81	13.08	73.4
	1989-90	18.93	13.80	72.9

* = Kandla POL traffic includes traffic handled at Vadinar

SHARE OF TRAFFIC IN PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS DURING 1969-70 TO 1989-90.

(Million Tonnes)

Name of the Port	Year	Total Traffic	POL traffic	POL as %age of total traffic at the port.
1.	2.	3.	4.	5.
Vishakapatnam	1969-70	8.30	1.94	23.4
	1979-80	10.23	1.94	19.0
	1981-82	10.85	2.11	19.4
	1982-83	10.18	2.10	20.6
	1983-84	11.35	4.03	35.5
	1984-85	12.87	4.47	34.7
	1985-86	15.91	6.27	39.4
	1986-87	15.04	5.31	35.3
	1987-88	15.37	5.57	36.2
	1988-89	20.37	6.99	34.3
	1989-90	21.12	6.83	32.2
Mormugao	1969-70	9.03	0.15	1.1
	1979-80	14.80	0.73	4.9
	1981-82	14.89	0.66	4.4
	1982-83	12.76	0.78	6.1
	1983-84	13.22	1.02	7.7
	1984-85	14.51	0.90	6.2
	1985-86	16.10	0.98	6.1
	1986-87	14.92	0.78	5.4
	1987-88	13.33	1.13	8.5
	1988-89	15.39	1.30	8.5
	1989-90	14.17	1.04	7.3
Paradip	1969-70	1.75	-	-
	1979-80	2.31	-	-
	1981-82	1.17	-	-
	1982-83	1.81	-	-
	1983-84	1.59	-	-
	1984-85	2.14	-	-
	1985-86	3.33	-	-
	1986-87	4.85	-	-
	1987-88	5.19	-	-
	1988-89	6.03	-	-
	1989-90	6.18	-	-
Port of Tuticorin	1977-78	0.63	0.35	55.6
	1979-80	2.41	0.44	18.3
	1981-82	2.69	0.47	17.5
	1982-83	3.23	0.52	16.1
	1983-84	3.55	0.43	13.5
	1984-85	3.77	0.51	13.5
	1985-86	4.22	0.34	8.1
	1986-87	4.15	0.33	7.2
	1987-88	4.26	0.37	9.4
	1988-89	5.14	0.48	9.3
	1989-90	5.32	0.48	9.0
New Mangalore	1977-78	0.38	0.20	52.6
	1979-80	0.90	0.21	23.3
	1981-82	1.64	0.36	22.0
	1982-83	2.27	0.35	15.4
	1983-84	2.84	0.35	12.3
	1984-85	3.38	0.44	13.0
	1985-86	3.69	0.41	11.1
	1986-87	5.43	0.53	9.8
	1987-88	6.11	0.46	8.2
	1988-89	7.08	0.57	7.3
	1989-90	7.66	0.58	7.6
GRAND TOTAL	1969-70	54.35	19.02	35.0
	1977-78	66.23	26.21	39.6
	1979-80	78.49	28.78	36.7
	1981-82	88.06	34.44	39.1
	1982-83	96.12	46.16	48.0
	1983-84	100.18	48.97	48.9
	1984-85	106.74	49.77	46.6
	1985-86	120.04	54.63	45.5
	1986-87	124.37	56.10	45.1
	1987-88	133.68	63.15	47.2
	1988-89	146.43	64.33	43.9
	1989-90	147.28	62.00	42.1

SOURCE: Ministry of Transport, Indian Port Association.

MOVEMENT OF POL TRAFFIC ON RAILWAYS SINCE 1970-71

YEAR	Tonnes Originating ('000'MTS)	Earnings ('000'Rs.)	Average Lead (Kms)	Earning (Paise/ Tonnes Kms.)	Average freight Col.3 divided 2 Tonnes/Rs.
1	2	3	4	5	6
1970-71	8857	464081	594	8.8	52.40
1971-72	10063	523049	593	8.8	51.98
1972-73	10181	550982	614	8.8	54.12
1973-74	9994	555560	638	8.7	55.59
1974-75	10751	723192	642	10.5	67.27
1975-76	11663	860925	605	12.2	73.82
1976-77	12395	1038462	609	13.8	83.78
1978-79	13062	1120693	631	13.6	85.80
1979-80	14301	1324332	698	13.3	92.60
1980-81	14266	1497510	729	14.4	104.97
1981-82	14954	1835693	780	15.7	122.76
1982-83	16555	2848050	731	23.5	172.04
1983-84	17342	3588169	647	32.0	206.91
1984=85	17949	4052635	597	37.8	225.79
1985-86	18169	4157626	563	40.6	228.83
1986-87	18635	4705145	588	42.9	252.49
1986-87	19853	5395900	588	46.2	271.79
1987-88	21690	7175776	635	52.1	330.83
1988-89	22598	7639458	626	54.0	338.06

SOURCE : Railway Board.

RAIL FREIGHT IN RESPECT OF PETROLEUM PRODUCTS:

RS/KL

Distance Kms.	Dangerous POL							Non-Dangerous POL							
	1.4.82	1.4.83	15.4.85	1.12.86	1.4.88	1.4.89	1.4.90	1.6.82	1.6.83	1.6.84	15.4.85	11.12.86	1.4.88	1.4.89	1.4.90
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
100	71.4	78.0	78.0	84.3	89.4	99.2	106.10	53.5	59.2	63.9	63.9	69.1	78.5	87.2	93.3
300	143.3	175.2	175.2	203.4	215.6	239.3	256.1	106.3	130.5	141.7	141.7	164.5	188.5	208.7	223.3
500	207.6	267.0	267.0	326.6	346.2	384.3	411.2	153.5	197.8	215.1	215.1	263.2	301.4	334.5	357.9
800	357.2	393.9	433.3	522.1	553.4	614.3	567.3	263.6	290.9	316.6	348.3	419.7	481.0	533.9	571.3
1000	425.5	478.5	526.4	639.6	678.0	752.6	805.3	313.5	352.9	384.3	422.7	513.6	588.9	653.7	699.5
1500	584.4	655.5	721.1	814.6	969.5	1076.1	1151.4	430.4	482.7	525.9	578.5	733.7	841.6	934.2	999.6
2000	729.2	796.5	876.2	1123.2	1190.6	1321.6	1414.1	530.5	586.1	638.7	702.6	900.6	1033.2	1146.8	1227.1
2500	828.0	919.5	1011.5	1284.2	1361.8	1511.6	1617.4	609.0	676.3	737.1	810.8	1029.8	1181.6	1311.6	1403.4

Non-dangerous POL : Include HSDO, LDO and other petroleum and Hydro-carbons Oil (Except Kerosene Oil).

Dangerous POL : Include Motor Spirit, Benzene and other dangerous mineral Oils.

SOURCE : Ministry of Railways

Crude Oil, Natural Gas & Product Pipelines in India as on 1.4.1990

Pipelines	Owned by	Length in KMS	Diametre in Inches
1.	2.	3.	4.
1. CRUDE PIPELINES (ONSHORE)			
Ankleshwar - Koyali (Baroda)	ONGC	94.77	16"
Kalol - Nawagam	ONGC	48.90	12-3/4"
Nawagam-Koyali	ONGC	77.63	14"
Sanand -Kalol	ONGC	12.52	8-5/8"
Sobhashan - North Kadi	ONGC	20.23	8-5/8"
North Kadi -Kalol	ONGC	35.59	12-3/4"
Jhalora -Sanand	ONGC	9.36	8-5/8"
Lahwa - Moran	ONGC	17.50	12-3/4"
Rudrasagar - Lakwa	ONGC	38.00	8-5/8"
Geleki - Dikhow	ONGC	18.90	8-5/8"
Goleki - Jorhat	ONGC	48.40	14"
Borhollah - Jorhat pipelines	ONGC	42.80	12-3/4"
Nada to GNAQ	ONGC	23.00	8"
Lanwa to Balol	ONGC	14.50	12"
Nawagam to Koyali (Vaded to Akhdol Section)	ONGC	23.30	18"
GNAQ to Jambusar Junction Point	ONGC	12.70	8"
Digboi oilfield-Digboi Refinery	OIL	12.50	6"
Digboi oilfield-Digboi Refinery	OIL	10.40	4"
Nahorkatiya-Digboi	OIL	35.00	8"
Nahorkatiya-Gauhati loopline	OIL	100.00	16"
Nahorkatiya-Gauhati	OIL	401.00	16"
Gauhati-Barauni	OIL	757.00	14"
Gauhati-Barauni loopline	OIL	112.00	16"
Nararabet to Salaya Tank Farm 2 lines	IOC	5.70 each	42"
Salaya-Viramgam	IOC	275.00	28"
Viramgam-Koyali	IOC	141.00	18"
Viramgam-Mathura	IOC	803.00	24"
North Kadi Kalol GGS-I to S.Kadi CTF	ONGC	5.10	12-3/4"
Santhal CTF to North Kadi	ONGC	4.52	12-3/4"
Jotana GGS-I to Santhal CTF	ONGC	2.73	4-1/2"
Viraj GGS-I to South Kadi CTF	ONGC	5.83	8-5/8"
Geleki-Dikhu Junction Point	ONGC	17.80	12-3/4"
Total Onshore		3232.38	

Contd...

Crude Oil, Natural Gas & Product Pipelines in India as on 1.4.1990

Pipelines	Owned by	Length (in KMS)	Diametre (in Inches)
1.	2.	3.	4.
II. CRUDE PIPELINES (OFFSHORE)		449.93	
BH (platform °F) to Uran	ONGC	203.00	30"
Uran-Trombay	ONGC	24.00	36"
Trombay-Bhutcher Island	ONGC	4.40	36"
HRA-R-12	ONGC	38.92	12"
Gandhar-Saraswani	ONGC	55.00	12"
Nawagam-Jhalora-Kalol	ONGC	55.00	14"
GNAQ-Junction Point of Gandhar Saraswani	ONGC	15.00	4"
Nada-GANQ	ONGC	25.00	4"
SBM to Nararabet	IOC	5.27	42"
BPA-BH-URAN	ONGC	15.97	12"
ICP-BHS	ONGC	8.37	12"
III. GAS PIPELINES (ONSHORE)		2536.22	
Cambay-Dhauwaran	ONGC	25.00	14"
Ankleshwar-Uttaran	ONGC	38.25	16"
Ankleshwar-Baroda	ONGC	96.55	14"
Nawagam-Calico Mills	ONGC	24.50	8-5/8"
Sanand-Kalol	ONGC	12.67	6-5/8"
Kalol-IFFCO(FG)	ONGC	2.51	8-5/8"
Kalol-IFFCO(AS)	ONGC	2.51	12-3/4"
Subhashan-Dubh Sagar Dairy	ONGC	9.20	8-5/8"
Dabka GCS Sarasvani Valve Platform	ONGC	10.50	4-1/2"
North Kadi CTF to S.Kadi CTF Kadi GIDC	ONGC	16.40	8-5/8"
Jhalora GGS-I to Sanand GGS-2	ONGC	9.27	8-5/8"
Jotna GGS-1 to Santhal CTF TO N. Kadi GGS-1	ONGC	7.17	8-5/8"
Motwan to Ajkleshwar CTF	ONGC	2.89	8-5/8"
Kalol GCS - Kadi GIDC	ONGC	19.40	8-5/8"
Ramol GCS to Nawagam CTF	ONGC	17.45	6-5/8"
Nawagam CTF to Amul Diary CTF to	ONGC	50.00	4-1/2
Uttram Mawas	ONGC	24.50	12-3/4"
Hazira-Karibhco	ONGC	4.00	16"
Uran-Hazira	ONGC	14.00	36"
ASEB Gas Pipeline	ONGC	16.15	12-3/4"
Lakwa to Maibella			
Dhiku Junction PT - Lakwa CTF	ONGC	23.50	12-3/4"
Narimanam-Nagapattinam	ONGC	14.00	4"
Narsapur-Palakollu	ONGC	12.20	8"
Naraspur-Karvur	ONGC	72.00	8"
Naraspur-Tatipaka	ONGC	26.60	14"
Gandhar-Dabka	ONGC	47.00	12"
Digboi-Duliajan	OIL	42.00	10"
Hajira-Bijaupur	GAIL	641.00	36"
Bijaupur-Bureri	GAIL	110.00	18"
Bureri-Anta	GAIL	20.00	12"
Bijaypur-Auraiya	GAIL	351.00	30"
Auraiya-Jagdishpur	GAIL	217.00	18"
Auraiya-Delhi	GAIL	466.00	18"-24"

Contd..

Crude Oil, Natural Gas & Product Pipelines in India as on 1.4.1990

	South Santhal CTF to Lanwa EPS-I	ONGC	27.50	4"
	Sanand GGS-I to GGS-2	ONGC	5.00	8"
	Dahej to Gandhar Via Pakhajan	ONGC	26.50	8"
	GIPCO to Chokari Via Undera	ONGC	32.00	12"
IV.	GAS PIPELINES (OFFSHORE)		485.98	
	Uran to MSEB-I	ONGC	6.00	12"
	BH (Platform 'F') to Uran	ONGC	203.00	26"
	Uran-Trombay	ONGC	24.00	18"
	Uran-MSEB-II	ONGC	6.00	12"
	Uran-Thal	ONGC	21.00	26"
	South Bassein to Umrat	ONGC	216.00	36"
	BPB-Bassein Hazira B	ONGC	9.98	30"
	Total Gas Pipelines (III+IV)		3022.20	
V.	PRODUCT PIPELINES			
	Gauhati-Siliguri	IOC	435.00	8-5/8"
	Digboi-Tinsukia (WOL)	IOC	35.48	8-5/8"
	Digboi-Tinsukia (BOL)	IOC	38.95	6"
	Digboi-Tinsukia (ROL-1)	IOC	33.72	6"
	Digboi-Tinsukia (ROL-2)	IOC	33.71	4"
	Koyali-Ahemdabad	IOC	115.70	8-5/8"
	Baraun-Kanpur	IOC	668.78	12-3/4"
	Haldia-Mourigram-Rajbandh	IOC	268.58	12-3/4"
	Haldia-Barauni	IOC	524.83	12-3/4"
	Mathura-Delhi	IOC	147.00	16"
	Delhi-Ambala	IOC	202.00	14"
	Ambala-Jullunder	IOC	164.00	12-3/4"
	Eranakulam Ins. to FACT:Alwaya	BPCL	13.00	4"
	BPCL (R) to Pir Pau Jetty	BPCL	3.50	8"
	BPCL (R) to HPCL (R)	BPCL	3.00	4"
	BPCL (R) to HPCL (R)	BPCL	1.50	8"
	BPCL (R) to Pir Pau Jetty	BPCL	4.50	14"
	Bigwasan Top to Palam Delhi (ATF)	BPCL	4.00	8"
	BPCL(R) to IOC Sewree Installation	BPCL	4.00	12"
	BPCL(R) to Pir Pau Jetty	BPCL	2.70	8"
	BPCL (R) to ONGC(TT)	BPCL	2.20	6"
	BPCL (R) to HPCL(R)	BPCL	1.50	12"
	BPCL(R) to HPCL(R)	BPCL	1.50	10"
	BPCL(R) to HPCL(R)	BPCL	1.50	10"
	BPCL(R) to Pau Jetty	BPCL	1.00	10"
	Total Product Pipeline		2711.65	
VI.	LPG Pipelines (OFFSHORE)			
	Uran-Trombay	ONGC	24.00	8"
VII.	NGL Pipelines (OFFSHORE)			
	Uran-Trombay	ONGC	24.00	8"
	Grand Total (I to VII)		9464.16	

XVI. MARKETING NET WORK

Retail outlets in India as on Ist January of each year

(Number)

Year	Nos.	B/Shell/ BPCL	ESSO/ HPCL	CALTEX/ HPCL (VMU)	IOC	IBP	AOC/ AOD	TOTAL
1.	2.	3.	4.	5.	6.	7.	8.	9.
1968	Nos.	3683	1955	1437	1516	229	119	8939
	%	41.2	21.9	16.1	16.9	2.6	1.3	100
1969	Nos.	3700	1948	1396	2131	223	124	9522
	%	38.8	20.5	14.7	22.4	2.3	1.3	100
1970	Nos	3577	1922	1392	2655	233	129	9908
	%	16.1	19.3	14.0	26.8	2.4	1.4	100
1975	Nos.	3173	1867	1206	3546	525	163	10480
	%	30.3	17.8	11.5	33.8	5.0	1.6	100
1980	Nos.	3296	3198@		4231	975	173	11873
	%	27.8	26.9		35.6	8.2	1.5	100
1981	Nos.	3308	3225@		4333	1001	175	12042
	%	27.5	26.8		36.0	8.3	1.4	100
1982	Nos.	3314	3247@		4413	1019	178	12171
	%	27.2	26.7		36.2	8.4	1.5	100
1983	Nos.	3232	3124@		4504	1024	186	12070
	%	26.8	25.9		37.3	8.5	1.5	100
1984	Nos.	3378	3391@		4654	1051	190	12664
	%	26.7	26.8		36.7	8.3	1.5	100
1985	Nos.	3442	3451@		4707	1062	202	12864
	%	26.7	26.8		36.6	8.3	1.6	100
1986	Nos.	3514	3545		4848	1087	215	13209
	%	26.7	26.8		36.7	8.2	1.6	100
1987	Nos.	3614	3630		5048	1126	225	13643
	%	36.4	26.6		37.0	8.3	1.6	100
1988	Nos	3690	3717		5191	1174	235	14007
	%	26.3	26.5		37.1	8.4	1.7	100
1989	Nos	3769	3784		5313	1194	250	14310
	%	26.3	26.5		37.1	8.4	1.7	100
1990	Nos	3847	3829		5452	1228	268	14624
	%	26.3	26.2		37.3	8.4	1.8	100

Note: 1. % = Percentage
2. @ = Includes HPCL (VMU) retail outlets
3. The data excludes consumers outlets.

STATE-WISE NUMBER OF RETAIL OUTLETS, MPDC's/FFCS, LDO/SKO DEALERS AND LPG DISTRIBUTORS AS ON 1.4.1990

(Numbers)

State/Union Territories	Retail outlets	MPDC/ FFC	LDO/SKO dealers	LPG distributors
1.	2.	3.	4.	5.
STATES				
1. Andhra Pradesh	1181	20	599	332
2. Arunachal Pradesh	26	2	25	12
3. Assam	315	1	338	102
4. Bihar	892	21	362	137
5. Goa	63	1	17	27
6. Gujarat	948	13	439	278
7. Haryana	482	20	137	112
8. Himachal Pradesh	75	1	24	33
9. Jammu & Kashmir	115	1	30	53
10. Karnataka	915	4	296	222
11. Kerala	690	1	237	154
12. Madhya Pradesh	841	18	333	207
13. Maharashtra	1489	16	624	527
14. Manipur	26	3	32	9
15. Meghalaya	46	-	33	13
16. Mizoram	12	1	12	7
17. Nagaland	24	1	16	13
18. Orissa	316	7	163	75
19. Punjab	940	17	228	151
20. Rajasthan	868	28	229	141
21. Sikkim	9	-	7	2
22. Tamil Nadu	1394	-	452	298
23. Tripura	28	1	39	10
24. Uttar Pradesh	1820	72	636	403
25. West Bengal	981	16	424	212
UNION TERRITORIES:				
26. A.N.Islands	3	-	1	1
27. Chandigarh	18	-	10	24
28. D.N.Haveli	3	-	1	-
29. Delhi	234	1	85	202
30. Daman & Diu	4	-	4	2
31. Pondicherry	25	-	8	5
32. Lakshdweep	-	-	-	1
33. Bhutan	4	-	2	-
GRAND TOTAL	14787	266	5843	3765

STATE-WISE NUMBER OF LPG DOMESTIC CUSTOMERS AS ON 1.4.1990

(Numbers)

	STATE/UTS	BPCL	HPCL	IOC	AOD	TOTAL
	STATES					
1.	Andhra Pradesh	172874	676831	454813	--	1304518
2.	Arunachal Pradesh	--	--	2914	5668	8582
3.	Assam	--	--	100950	129661	230611
4.	Bihar	21225	54147	390328	--	465700
5.	Goa	45088	69264	415	--	114767
6.	Gujarat	310888	302658	968734	--	1582280
7.	Haryana	115740	59001	280285	--	455026
8.	Himachal Pradesh	1221	15473	83760	--	100454
9.	Jammu & Kashmir	12111	94685	45648	--	152444
10.	Karnataka	161845	360515	278498	--	800858
11.	Kerala	113586	58162	319461	--	491209
12.	Madhya Pradesh	133248	272173	508243	--	913664
13.	Maharashtra	1485767	1360576	118931	--	2965274
14.	Manipur	--	--	9072	21094	30166
15.	Meghalaya	--	--	8981	11364	20345
16.	Mizoram	--	--	6723	7797	14520
17.	Nagaland	--	--	7023	10301	17324
18.	Orissa	6028	102225	83116	--	191369
19.	Punjab	127393	73300	387609	--	588302
20.	Rajasthan	122745	152176	268975	--	543896
21.	Sikkim	--	--	4302	--	4302
22.	Tamil Nadu	205356	140955	582308	--	928619
23.	Tripura	--	--	10280	11211	21491
24.	Uttar Pradesh	297393	140088	1210243	--	1647724
25.	West Bengal	36118	172454	1099246	--	1307818
	UNION TERRITORIES:					
1.	Andaman/Nicobar	--	--	4246	--	4246
2.	Chandigarh	8182	28633	84095	--	120910
3.	D.N.Haveli	--	3100	--	--	3100
4.	Delhi	231261	154894	783784	--	1169939
5.	Daman & Diu	--	6270	--	--	6270
6.	Lakshadweep	--	--	102	--	102
7.	Pondicherry	3373	3962	20776	--	28111
	TOTAL	3611442	4301542	8123861	197096	16233941

XVII. ENERGY

GROSS PRODUCTION OF ENERGY BY VARIOUS SOURCES IN INDIA

Year	Coal & Lignite			Hydro-carbon			Power Million (Kwh)			
	Coal (Million Tonnes)	Lignite	Total	Natural Gas (MM3)	Crude Petroleum ('000' Tonnes)	Petroleum Products	Thermal	Hydel	Nuclearear	Total
1	2	3	4	5	6	7	8	9	10	11
1960-61	55.67	0.05	55.72	-	448	6077	9100	7837	-	16937
1965-66	67.73	2.57	70.30	507	3473	10081	19641	16734	-	36375
1970-71	72.95	3.39	76.34	1445	6822	18333	28162	25248	2417	55827
1971-72	72.42	3.72	76.14	1535	7299	19867	31713	28024	1189	60926
1972-73	77.22	2.89	80.11	1565	7321	19092	36217	27196	1133	64546
1973-74	78.17	3.32	81.49	1713	7189	20724	35321	28972	2396	66689
1974-75	88.41	2.94	91.35	2041	7684	20800	40109	27875	2206	70190
1975-76	99.63	3.03	102.66	2368	8448	22055	43303	33302	2626	79231
1976-77	100.99	4.02	105.01	2428	8898	22732	50245	34836	3252	88333
1977-78	100.98	3.58	104.56	2839	10763	24670	52495	37961	1740	92196
1978-79	101.95	3.30	105.25	2811	11633	25671	53420	47138	2770	103328
1979-80	103.94	2.90	106.84	2767	11766	27228	57155	45494	2876	105525
1980-81	113.91	5.11	119.02	2358	10507	25346	61301	46542	3001	110844
1981-82	124.23	6.31	130.54	3851	16194	29717	69392	49597	3021	122010
1982-83	130.50	6.93	137.43	4936	21063	32761	79880	48309	2022	130211
1983-84	138.22	7.30	145.52	5961	26020	34793	86535	49867	3494	139896
1984-85	147.41	7.80	155.21	7241	28990	35161	98770	53785	4078	156633
1985-86	154.20	8.05	162.25	8134	30168	41156	114119	50933	4985	170037
1986-87	165.77	9.43	175.20	9853	30480	45373	128820	53760	5020	187610
1987-88	179.75	11.16	190.91	11467	30357	47277	149460	47400	5040	201890
1988-89	194.59	12.40	206.97	13217	32040	49505	157510	57790	5820	221120
1989-90*	200.85	11.23	212.08	16989	34087	53505	196600	62000	6400	245000

* = Provisional @ = Includes RBF

Source = i) Central Electricity Authority and Economic Survey 1989-90.
ii) Coal Statistics - Coal Controller's Organization, Department of Coal.

Sectoral Shares In Commercial Energy Consumption 1960-61 to 1984-85

	Total Commercial energy			Shares of specific fuels in 1984-85		
	60-61	79-80	84-85	Oil	Electricity	Coal
Household	20.6	15.7	18.2	29	11	3
Agriculture	3.6	9.4	9.8	10	16	-
Industry	39.2	38.2	36.4	5	62	78
Transport	33.8	32.8	31.4	56	2	13
Others	2.8	3.9	4.2	-	9	6
	100.0	100.0	100.0	100	100	100

SOURCE: The Seventh Five Year Plan 1985-90

Estimates of Commercial and Non-commercial Energy Requirements In 1999-2000

Energy	Sector Consumption					
	Household	Industry	Transport	Agriculture	Other	Total
Electricity (Billion KWH)	81.4-83.5	249.0-282.8	8.28-8.9	40.9-41.5	44.42-48.0	424.0-465.0
Coal (Million Tonnes)	14.0	161.0	7.81	-	5.19	188.0*
Oil (Million Tonnes)	17.73	12.0	29.86	8.1	5.0	72.7
Fuelwood (" ")	191.6	-	-	-	-	191.6
Dungcake (" ")	105.0	-	-	-	-	105.0
Vegetable Waste (" ")	59.0	-	-	-	-	59.0

* Net of coal consumed in the power sector.

SOURCE: The Seventh Five Year Plan 1985=90.

XVIII - GENERAL

Gross Domestic Product of Crude Petroleum & Natural Gas, Coal and Lignite at current prices.

(Rs.Lakhs)

Year	Crude Petroleum & Natural Gas	Coal & Lignite
1	2	3
1976-77	18978	51671
1977-78	27278	51504
1978-79	33148	50615
1979-80	37221	75908
1980-81 (Revised)	35852	103742
1981-82 (Revised)	171254	123911
1982-83 (Revised)	218532	146252
1983-84 (Revised)	264771	166934
1984-85 (Revised)	319546	217644

XIX. INTERNATIONAL PETROLEUM STATISTICS

World Proved reserves of Oil and Natural Gas at End 1989

Country	Crude oil			Natural Gas		
	Reserves (Million Tonnes	Percentage share of total	R/P Ratio **	Reserves (Trillion cubic metres)	Percentage share of total	R/p ratio **
1.	2.	3.	4.	5.	6.	7.
North America	5.3	4.2	10.4	7.4	6.5	12.6
U.S.A.	4.3	3.4	10.0	4.7	4.1	9.6
Canada	1.0	0.8	13.1	2.7	2.4	27.2
Latin America	17.6	12.5	50.9	6.7	5.8	75.0
Argentina	0.3	0.2	13.8	0.8	0.7	32.2
Brazil	0.3	0.3	11.0	---	---	---
Ecuador@	0.2	0.2	14.7	0.1	0.1	*
Mexico	7.9	5.6	55.7	2.1	1.8	78.4
Venezuela	8.4	5.8	84.7	2.9	2.5	*
Others	0.5	0.4	13.3	0.8	0.7	51.8
Western Europe	2.4	1.8	12.6	5.4	4.9	31.3
Norway	1.5	1.1	20.2	2.3	2.1	72.8
United Kingdom	0.5	0.4	5.5	0.6	0.5	13.3
Others	0.4	0.3	15.5	2.5	2.3	22.2
USSR & Eastern Europe	8.2	5.9	13.0	43.3	38.3	50.7
U.S.S.R.	8.0	5.8	13.1	42.5	37.6	53.2
Eastern Europe	0.2	0.1	10.1	0.8	0.7	14.0
Middle East	89.3	65.2	*	34.7	30.7	*
Abu Dhabi	12.1	9.1	*	5.2	4.6	*
Dubai & N.Emirates	0.8	0.4	34.4	0.5	0.4	*
Iran@	12.7	9.2	89.1	14.2	12.5	*
Iraq@	13.4	9.9	97.1	2.7	2.7	*
Kuwait@	13.0	9.3	*	1.4	1.2	*
Neutral Zone	0.7	0.5	35.5	0.3	0.3	*
Oman	0.6	0.4	20.1	---	---	---
Qatar@	0.6	0.4	31.5	4.6	4.1	*
Saudi Arabia@	34.7	25.2	*	5.1	4.5	*
North Yeman	0.1	+	14.4	---	---	---
South Yeman	0.4	0.3	*	---	---	---
Syria	0.2	0.2	14.5	---	---	---
Others	+	0.3	7.9	0.7	1.0	*
Africa	7.8	5.9	27.5	7.5	6.7	*
Algeria@	1.2	0.9	23.7	3.2	2.9	72.3
Angola	0.3	0.2	12.4	---	---	---
Egypt	0.6	0.4	14.0	0.3	0.3	41.8
Gabon	0.1	+	9.2	+	+	*
Libya@	3.0	2.3	54.9	0.7	0.6	*
Nigeria@	2.2	1.6	27.5	2.5	2.2	*
Tunisia	0.2	0.2	47.7	---	---	---
Others	0.2	0.3	13.9	0.8	0.7	*
Asia & Australasia	6.2	4.5	20.2	8.0	7.1	55.3
Japan	+	+	13.5	+	+	15.9
Brunei	0.2	0.1	26.7	0.3	0.3	38.6
China	3.2	2.3	22.8	1.0	0.9	69.9
Indonesia@	1.1	0.8	16.6	2.5	2.2	62.0
Malaysia	0.4	0.3	13.7	1.5	1.3	79.0
Other Asia	0.1	0.1	20.0	1.1	1.0	48.2
India	1.0	0.7	29.3	0.7	0.6	52.4
Australia	0.2	0.2	8.9	0.5	0.4	26.2
New Zealand	+	+	11.4	0.1	0.1	30.4
TOTAL WORLD	136.8	100.0	44.4	113.0	100.0	56.3
of which OPEC	104.2	75.6	92.3	63.0	60.8	60.4

*Over 100 years.+Less than 0.05. @OPEC Member Countries.

Source: BP Statistical review of World Energy June 1990.

WORLD ESTIMATED CRUDE OIL PRODUCTION 1981-1989

(Million Tonnes)

Country	1981	1983	1985	1987	1988	1989	% age change 1989 over 1988.	% age share of Total 1989
1	2	3	4	5	6	7	8	9
North America								
USA	482.8	486.8	500.8	471.2	463.2	433.8	-6.3	14.0
Canada	72.9	71.7	85.0	84.8	84.0	80.2	-4.5	2.6
Total N.America	555.7	558.5	585.8	556.0	547.2	514.0	-6.1	16.6
Latin America								
Argentina	25.5	24.9	24.0	22.3	23.5	23.6	0.4	0.8
Brazil	10.7	17.6	28.1	29.6	31.0	30.9	-0.3	1.0
Colombia	6.8	7.8	8.9	19.6	19.3	20.3	5.2	0.7
Ecuador	10.3	11.6	13.5	8.8	15.0	13.8	-7.7	0.4
Mexico	128.3	146.6	149.7	141.8	141.0	141.2	0.2	4.6
Trinidad	10.1	8.2	8.8	8.3	7.6	8.0	5.1	0.3
Venezuela	112.5	97.0	87.6	89.0	96.2	99.2	3.1	3.2
Others	13.6	13.0	13.6	12.0	10.6	9.4	-10.9	0.3
Total Latin America	317.8	326.7	334.2	331.4	344.2	346.4	0.7	11.3
Western Europe								
Austria	1.4	1.3	1.2	1.1	1.2	1.3	2.7	+
Denmark	0.8	2.2	2.9	4.6	4.7	5.5	16.8	0.2
France	1.7	2.3	3.3	3.6	3.7	3.6	-2.7	0.1
Italy	1.5	2.2	2.4	3.9	4.8	4.5	-6.4	0.1
Norway	24.9	32.0	40.3	49.1	56.7	74.9	32.2	2.4
Turkey	2.4	2.2	2.1	2.6	2.6	2.6	2.5	0.1
United Kingdom	89.4	114.9	128.2	123.3	114.4	91.9	19.7	3.0
West Germany	4.5	4.1	4.1	3.8	4.0	3.8	4.1	0.1
Others	3.0	7.2	7.6	7.5	6.9	5.8	-15.5	0.2
Total W.Europe	129.6	168.4	192.1	199.5	199.0	193.9	-2.5	6.2
Middle East								
Abu Dhabi	54.5	39.3	41.6	56.1	60.1	75.4	25.3	2.4
Dubai & N.Emirates	18.3	17.2	22.5	24.2	24.3	23.2	-4.5	0.7
Iran	65.8	122.4	110.0	114.7	112.9	142.2	26.0	4.6
Iraq	44.0	54.1	70.6	102.4	127.7	138.6	8.5	4.5
Kuwait	48.2	44.7	45.7	53.5	66.8	79.4	19.0	2.6
Neutral Zone	19.4	16.2	17.0	20.2	16.6	20.9	25.4	0.7
Oman	16.4	19.6	25.4	29.1	29.9	29.4	-1.5	0.9
Qatar	20.2	14.7	15.9	15.9	16.9	18.7	10.6	0.6
Saudi Arabia	491.3	255.8	173.1	212.2	257.3	256.5	-0.3	8.3
Others	11.1	11.6	11.6	14.9	25.3	29.7	17.5	1.0
Total Middle East	789.2	595.6	533.4	643.2	737.8	814.0	10.3	26.3
Africa								
Algeria	46.3	42.9	47.7	48.9	47.2	50.4	7.0	1.6
Egypt	34.1	35.7	45.3	45.9	44.0	44.5	1.0	1.4
Libya	58.7	53.0	52.7	47.9	50.6	54.8	8.3	1.8
Gabon	7.6	7.8	7.7	7.8	8.7	10.9	24.8	0.4
Nigeria	71.0	61.0	72.9	63.7	67.6	79.1	17.0	2.6
Other Africa	22.0	26.6	33.8	43.7	48.4	47.6	4.4	1.5
Total Africa	239.7	227.0	260.1	257.9	266.5	287.3	7.9	9.3

Contd...

WORLD ESTIMATED CRUDE OIL PRODUCTION 1981-1989

(Million Tonnes)

Country	1981	1983	1985	1987	1988	1989	%age change 1989/1988	%age share of total 1989
1	2	3	4	5	6	7	8	9
Asia & Australsia								
Japan	0.4	0.4	0.5	0.6	0.6	0.6	-6.8	+
Brunei	8.6	8.6	7.4	7.0	7.0	7.0	-0.8	0.2
Indonesia	82.2	65.3	63.9	63.3	63.8	66.9	+4.9	2.2
Malaysia	12.4	20.2	21.3	24.6	26.7	28.3	6.0	0.9
Other Asia & Austra.	36.5	50.2	64.3	65.1	64.9	65.7	0.8	2.1
of which India	14.9	25.1	29.9	30.4	31.9	34.2	7.2	1.1
Total Asia &Austra.	140.1	144.7	157.4	160.6	163.0	168.5	3.4	5.5
Total NCW	2172.1	2020.9	2063.0	2148.6	2257.7	2324.1	-4.2	69.8
Centrally Planned Economics (CPEs)								
China	101.0	106.0	124.9	132.9	137.0	138.3	0.9	4.5
USSR	609.0	616.3	595.0	624.2	624.0	607.5	-2.6	19.7
Others	21.5	23.2	21.8	21.0	20.8	19.9	-4.3	0.6
Total CPEs	731.5	745.5	741.7	778.1	781.8	765.7	-2.0	24.8
TOTAL WORLD	2903.6	2766.4	2804.7	2926.7	3039.5	3089.8	1.7	100.0
of which OPEC	1150.3	903.0	842.4	928.6	1031.7	1130.0	9.5	36.6

* Includes crude oil, oil sands and NGLs (natural gas liquids-the liquid content of natural gas, where this is recovered separately). Excludes liquid fuels from other sources as coal derivatives. + Less than 0.05. Note: Figures for India Inserted.

SOURCE: BP Statistical Review of World Energy June 1990.

CRUDE OIL PRODUCTION BY OPEC MEMBER COUNTRIES (1973-1989)

(Million Tonnes)

OPEC Countries	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Algeria	51	48	59	52	46	46	43	46	48	49	49	47	50
Ecuador	10	8	11	10	10	10	12	13	14	14	9	15	14
Gabon	8	11	10	9	8	8	8	8	8	8	8	9	11
Indonesia	66	65	79	78	82	69	65	69	64	67	63	63	67
Iran	293	268	158	74	66	120	122	109	110	95	115	113	142
Iraq	99	111	171	130	44	50	54	60	71	86	102	128	139
Kuwait	140	94	113	72	48	35	45	49	46	62	54	67	79
Libya	105	71	101	88	59	55	53	53	53	50	48	51	55
Nigeria	100	89	114	102	71	64	61	69	73	72	64	68	79
Qatar	27	21	25	23	20	16	15	20	16	17	16	17	19
Saudi Arabia	368	344	470	493	491	328	256	233	173	251	212	257	257
U.A.E.	102	107	117	111	92	75	72	78	78	87	99	101	119
Venuzuela	179	125	125	116	113	101	97	98	88	93	89	96	99
Total	1548	1362	1553	1358	1150	977	903	905	842	954	929	1032	1130

P = Provisional.

Source : BP Statistical Review of World Energy June 1990.

WORLD PRODUCTION OF NATURAL GAS 1981-1989

(Million Tonnes Oil equivalent)

Country	1981	1983	1985	1987	1988	1989	% change over 1988	% share of total 1989
1	2	3	4	5	6	7	8	9
North America								
USA	492.5	413.3	422.7	426.2	437.1	438.4	0.3	25.5
Canada	67.4	62.6	68.9	70.7	81.7	88.2	7.9	5.1
Total N. America	559.9	475.9	491.6	496.9	518.8	526.6	1.5	30.6
Latin America								
Argentina	7.5	9.3	12.7	16.8	19.3	21.6	11.8	1.3
Mexico	23.3	25.5	25.3	23.7	23.5	23.9	1.4	1.4
Venezuela	15.0	14.1	15.6	16.7	16.7	17.7	5.5	1.0
Others	10.1	12.8	14.5	15.5	16.9	16.4	-3.0	1.0
Total Latin America	55.9	61.7	68.1	72.7	76.4	79.6	3.9	4.6
Western Europe								
France	6.6	5.5	4.5	3.2	2.6	2.6	-1.9	0.1
Italy	11.6	11.1	12.4	14.7	14.9	15.3	2.4	0.9
Netherlands	67.6	61.1	64.4	56.1	49.9	52.9	6.2	3.1
Norway	23.5	22.9	22.8	26.7	26.8	28.8	7.2	1.7
United Kingdom	31.9	30.6	37.1	40.8	39.3	37.9	-3.4	2.2
West Germany	14.4	13.1	12.2	15.1	14.1	13.6	-3.5	0.8
Others	2.2	2.8	4.1	4.5	5.0	5.7	14.7	0.3
Total W.Europe	157.8	147.1	157.5	161.1	152.6	156.8	2.8	9.1
Middle East								
Abu Dhabi	6.5	6.1	10.0	11.4	11.6	11.9	2.2	0.7
Iran	6.5	9.9	13.1	14.4	18.0	19.5	8.5	1.1
Kuwait	4.8	4.3	3.8	4.3	5.8	7.5	27.7	0.4
Saudi Arabia	14.7	10.9	16.9	24.1	26.2	27.2	3.8	1.6
Others	8.4	8.3	12.0	16.0	20.4	21.6	5.9	1.3
Total Middle East	40.9	39.5	55.8	70.2	82.0	87.7	6.8	5.1
Africa								
Algeria	22.1	32.1	30.9	35.6	37.5	40.2	7.1	2.3
Libya	3.6	3.3	4.7	6.0	5.1	4.6	-8.1	0.3
Nigeria	1.6	1.3	1.3	3.3	3.4	3.6	6.7	0.2
Others	1.8	3.2	5.7	6.5	7.0	8.0	13.7	0.5
Total Africa	29.1	39.9	42.6	51.4	53.0	56.4	6.5	3.3
Asia & Australasia								
Japan	1.9	1.9	2.0	2.0	1.9	1.8	-5.2	0.1
Indonesia	17.3	19.9	27.3	32.9	34.2	35.8	4.5	2.1
Other S.E.Asia	8.4	11.4	21.4	27.0	29.1	30.6	5.3	1.8
Pakistan	6.1	8.6	9.3	10.7	11.3	11.2	-0.5	0.7
Other South Asia	6.6	10.3	12.9	14.9	16.6	18.0	8.5	1.0
Of which India	3.5	5.8	7.9	10.9	11.5	15.8	37.4	0.9
Australia	11.9	13.6	15.3	17.3	18.0	20.3	12.9	1.2
Total Asia & Austra.	52.2	65.7	88.2	104.8	111.1	117.7	5.6	6.8
Total NCW	895.8	829.8	903.8	957.1	993.9	1024.8	3.1	59.6
Centrally Planned Economies(CPEs)								
China	11.6	10.8	11.5	12.5	12.6	12.9	2.1	0.7
USSR	389.7	443.3	531.7	586.3	619.7	644.5	4.0	37.5
Others	40.6	42.1	44.9	44.4	40.2	38.4	-4.3	2.2
Total CPEs	441.9	496.2	588.1	643.2	672.5	695.8	-9.5	40.4
TOTAL WORLD	1337.7	1326.0	1491.9	1600.3	1666.4	1720.6	-1.0	100.0

* = Excluding gas flared or recycled. P = Provisional.

SOURCE:BP Statistical Review of World Energy June '90. Note:Figures for India Inserted.

PRODUCTIVITY OF PRODUCING WELLS IN SELECTED FIELDS IN OPEC MEMBERS COUNTRIES-1986
(AS AT YEAR END)

COUNTRY	Maximum Depth (Mtrs.)	W E L L S Flowing	Pumping	Total	AV-Daily Production (000'bbl)	t/w/d
1.	2.	3.	4.	5.	6.	7.
Algeria	3834	640	205	845	647	102
Divided Zone	N.A.	157	280	437	N.A.	N.A.
Ecuador	3241	87	802	889	257	40
Gabon	2867	134	156	290	165	78
Indonesia	3508	676	5145	5821	1257	29
I.R.Iran	3721	205	-	205	2037	1358
Iraq	3813	N.R.	N.R.	N.R.	1877	N.A.
Kuwait	3050	380	20	400	1238	429
S.P.Libyan A.J.	4362	428	592	1020	1308	169
Nigeria	4422	310	830	1140	1467	175
Qatar	2516	165	2	167	314	249
Saudi Arabia	2849	588	-	588	4784	1111
U.A.E.	3752	678	223	901	1309	191
Venezula	4102	1538	8517	10055	1648	24
Total OPEC		5986	16772	22758	18335	109

t/w/d = Tonne/Well/Day.

N.R. = Not Reported

N.A. = Not Available.

Source = OPEC Annual Statistical Bulletin - 1986.

WORLD CONSUMPTION OF NATURAL GAS 1981-1989.

(Million Tonnes Oil equivalent)

Country	1981	1983	1985	1987	1988	1989	% change over 1988	% share of Total 1989
1.	2.	3.	4.	5.	6.	7.	8.	9.
North America								
USA	498.2	433.9	445.9	443.6	463.8	487.6	5.1	28.6
Canada	47.8	47.3	44.8	41.2	52.8	53.7	1.8	3.1
Total N.America	546.0	481.2	490.7	484.8	516.6	541.3	4.8	31.7
Western Europe								
Austria	3.9	3.8	4.5	4.6	4.4	4.6	5.3	0.3
Belgium & Luxembourg	9.5	8.2	8.4	8.5	8.4	9.3	10.4	0.5
Denmark	-	-	0.6	1.3	1.6	1.7	6.6	0.1
Finland	0.6	0.6	0.8	1.4	1.4	1.9	32.8	0.1
France	24.5	22.2	23.3	25.0	23.6	24.4	3.4	1.4
Greece	-	--	0.1	0.1	0.1	0.1	25.9	+
Iceland	-	-	-	-	-	-	-	-
Republic of Ireland	0.9	1.6	1.8	1.0	1.2	1.4	10.0	0.1
Italy	22.8	22.6	27.2	32.2	34.1	37.0	8.5	2.2
Netherlands	30.0	29.5	32.5	33.6	30.6	30.8	0.7	1.8
Norway	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-
Spain	2.1	2.5	2.1	2.7	3.5	4.5	31.0	0.3
Sweden	-	-	0.1	0.3	0.4	0.4	5.1	+
Switzerland	0.8	0.9	1.0	0.9	1.1	1.3	10.9	0.1
Turkey	-	-	-	0.2	0.3	0.3	-	+
United Kingdom	42.4	44.0	48.4	50.5	47.9	44.9	6.3	2.6
West Germany	41.4	39.1	41.1	44.3	43.7	44.9	2.7	2.6
Cyprus/Gibraltar/Malta	-	-	-	-	-	-	-	-
Total W.Europe	178.9	175.0	191.9	206.6	202.3	207.5	2.5	12.1
Australia	10.6	11.2	12.4	14.0	14.3	15.8	9.9	0.9
New Zealand	1.0	2.1	3.3	3.8	4.2	5.8	38.5	0.3
Total Australsia	11.6	13.3	15.7	17.8	18.5	21.6	16.3	1.2
Japan	24.2	25.2	35.9	36.4	39.2	42.0	7.1	2.5
Total OECD	760.7	694.7	734.2	745.6	776.6	812.4	4.6	47.5
Rest of NCW								
Latin America	55.8	63.1	70.3	74.1	75.7	80.4	6.3	4.7
Middle East	36.8	35.9	51.0	69.0	80.4	85.0	5.8	5.0
Africa	21.3	25.2	26.5	27.9	29.3	31.2	6.7	1.8
South Asia	8.9	12.7	13.8	17.6	19.3	22.2	14.8	1.3
South East Asia	6.8	9.3	12.5	18.3	21.6	22.9	8.0	1.3
Total Rest of NCW	129.6	146.2	174.1	206.9	226.3	241.7	32.5	14.2
Total NCW	890.3	840.4	908.3	952.5	1002.9	1054.1	5.1	61.7
Centrally Planned Economies (CPEs)								
China	10.4	10.7	11.5	12.8	12.7	12.9	1.4	0.8
USSR	335.1	387.8	463.6	516.5	548.9	563.3	2.6	33.0
Others	65.9	70.3	75.7	80.2	76.5	77.1	-24.3	4.5
Total CPEs	411.4	468.8	550.8	609.5	638.1	653.3	-1.6	38.3
TOTAL WORLD	1301.7	1309.7	1459.1	1562.0	1641.0	1707.4	4.7	100.0

\+ Less than 0.05. P = Provisional.

Source : BP Statistical Review of World Energy, June 1990.

WORLD OIL REFINING CAPACITIES AT/END 1981 TO 1989(R)

(Million Tonnes Per Annum)

COUNTRY/AREA.	1981	1984	1985	1986	1987	1988	1989 (P)	% age Change 89 over 1988	% age Share of Total 1989
1	2	3	4	5	6	7	8	9	10
North America	1018	880	873	874	866	891	879	-1.3	23.6
USA	911	780	770	770	775	797	785	-1.5	21.1
Canada	107	100	103	104	91	95	94	-0.2	2.5
Latin America	443	395	362	365	369	379	395	4.3	10.6
Argentina	34	34	33	33	34	35	35	--	0.9
Brazil	76	65	65	66	70	70	73	3.5	2.0
Mexico	76	84	89	89	89	88	96	9.0	2.6
Netherlands Antil	1.39	37	16	16	16	16	16	--	0.4
Trinidad	23	16	13	15	15	15	15	--	0.4
Venuzuela	70	61	61	61	60	60	60	--	1.6
Others	125	98	85	85	85	95	101	6.5	2.7
Western Europe	979	761	731	713	695	700	686	-2.0	18.5
Belgium	48	36	36	35	35	35	35	--	1.0
France	161	109	108	101	95	91	85	-6.0	2.3
Italy	199	137	129	127	123	117	115	-1.7	3.1
Netherlands	88	71	69	69	69	70	70	--	1.9
Spain	77	72	72	71	71	71	71	--	1.9
United Kingdom	118	96	93	91	91	91	90	-0.7	2.4
West Germany	147	105	87	84	80	82	79	-4.0	2.1
Others	141	135	137	135	131	144	141	-2.0	3.8
Middle East	162	175	190	192	209	218	200	-8.3	5.3
Bahrain	13	13	13	13	13	13	13	2.0	0.3
Iran	31	26	26	26	26	27	27	--	0.7
Iraq	13	15	16	16	16	16	16	--	0.4
Kuwait	26	29	31	31	31	41	41	0.2	1.1
Saudi Arabia	33	43	56	56	68	69	50	-26.8	1.4
Others	46	49	48	50	55	54	54	--	1.4
Africa	102	126	127	127	132	141	142	0.8	3.8
Asia & Australasia	540	531	530	524	505	509	509	2.0	13.7
Japan	283	248	248	234	222	218	210	-3.8	5.6
Indonesia	26	38	39	39	39	39	39	--	1.1
Singapore	51	51	51	48	43	47	51	9.1	1.4
Other South E.Asia	96	100	100	105	105	104	106	2.7	2.9
South Asia	44	50	57	61	60	64	66	2.0	1.8
Of which India*	31.8	37.8	37.8	45.6	46.7	48.7	51.8	6.4	1.4
Australasia	40	39	35	37	36	37	37	--	1.0
Total NCW	3244	2868	2812	2776	2776	2823	2811	-0.4	75.6
Total Centrally Planned Economics(CPEs)	823	863	863	881	890	904	909	0.6	24.4
TOTAL WORLD	4067	3731	3675	3676	3666	3727.7	3772	-0.2	100.0

* = As on 1st April each year (P) = Provisional.

SOURCE: BP Statistical review of World Energy, June 1990.

R = Revised/based on BP statestical Review conversion factor.

WORLD REFINERY CRUDE THROUGHPUT : 1976 TO 1989.

(Million Tonnes Per Annum)

COUNTRY/AREA.	1976	1977	1978	1979	1980	1981
	1.	2.	3.	4.	5.	6.
U.S.A.	669	728	736	720	673	621
Canada	85	90	91	98	104	97
Latin America	282	285	298	310	322	327
Western Europe	656	636	640	680	614	546
Middle East	115	112	127	118	122	110
Africa	53	58	64	67	73	76
Japan	211	213	211	216	200	181
South East Asia	93	101	116	122	118	123
South Asia	27	30	32	34	35	40
Of Which India	22.8	24.4	25.6	28.2	25.1	29.5
Australasia	33	34	34	35	32	33
Total NCW	2224	2287	2348	2400	2293	2154
Centrally Planned Economies(CPEs)	576	594	641	659	663	668
TOTAL WORLD:	2800	2881	2989	3059	2956	2822

(Million Tonnes Per Annum)

COUNTRY/AREA.	1982	1983	1984	1985	1986	1987	1988	1989	%age change 1989 over 1988	1989 share of total
	1	2	3	4	5	6	7	8	9	10
U.S.A.	586	582	600	598	633	640	672	677	0.8	22.8
Canada	82	77	78	75	73	74	76	77	1.0	2.6
Latin America	303	290	285	271	273	275	274	291	4.2	9.8
Western Europe	502	484	487	473	501	496	515	517	0.3	17.4
Middle East	112	125	133	139	147	148	157	167	6.8	5.6
Africa	87	96	98	100	104	108	110	108	-1.1	3.7
Japan	167	162	167	155	149	145	149	158	6.2	5.3
South East Asia	116	118	122	132	138	137	145	154	6.0	5.2
South Asia	42	44	44	51	56	57	58	60	4.7	2.0
Of Which India	32	34	35	41	44	47	48	--	--	--
Australasia	31	30	31	29	29	28	34	34	2.2	1.2
Total NCW	2028	2008	2045	2023	2103	2108	2195	2209	0.6	74.3
Centrally Planned Economies(CPEs)	676	681	692	705	722	726	729	765	4.9	25.7
TOTAL WORLD:	2704	2689	2737	2728	2825	2834	2924	2974	1.7	100.0

NCW = Non Communist World. R = Revised/based on BP statistical Review conversion factor.

SOURCE: BP Statistical Review of the World Energy, 1990.

Combine the above 2 tables & arrange it horizontally.

Country-wise World Oil Consumption 1981-89

(Million Tonnes)

COUNTRY/AREA.	1981	1985	1986	1987	1988	1989	% age Change 1989 over 1988	% age Share of Total 1989
1	2	3	4	5	6	7	8	9
North America								
USA	746.0	721.7	751.3	763.4	793.4	792.6	-0.1	25.6
Canada	81.7	68.5	68.1	71.4	73.7	76.8	4.2	2.5
Total N.America	827.7	790.2	819.4	834.8	867.1	869.4	0.3	28.1
Latin America	212.6	209.7	215.3	220.6	240.3	248.5	3.4	8.0
Western Europe								
Austria	11.0	9.8	10.4	10.7	10.6	10.4	-1.7	0.3
Belgium&Luxembourg	24.5	20.8	23.5	23.7	24.4	23.1	-5.3	0.8
Denmark	12.8	10.7	10.5	19.6	9.5	9.1	-4.7	0.3
Finland	12.3	10.8	11.3	11.2	11.0	11.0	-0.2	0.4
France	99.0	84.3	86.0	86.6	86.0	88.4	2.8	2.9
Greece	11.9	12.0	12.2	13.2	13.7	13.6	-0.5	0.4
Iceland	0.5	0.5	0.5	0.6	0.6	0.7	9.8	$
Republic of Ireland	5.1	4.0	4.8	4.1	3.9	4.0	3.4	0.1
Italy	95.7	84.4	86.5	90.1	91.7	94.3	2.9	3.0
Netherlands	35.7	29.2	32.4	32.4	34.5	34.3	-0.5	1.1
Norway	8.7	9.0	9.3	9.7	9.2	8.9	-3.5	0.3
Portugal	8.8	8.8	9.5	8.9	8.7	9.3	6.6	0.3
Spain	50.4	42.9	42.7	43.8	44.7	46.6	4.2	1.5
Sweden	22.4	18.3	18.7	17.1	16.3	15.4	-5.2	0.5
Switzerland	11.9	12.0	13.2	12.4	12.4	11.9	-4.1	0.4
Turkey	15.4	16.8	18.3	21.0	22.3	22.1	-1.0	0.7
United Kingdom	74.7	77.4	77.4	75.2	79.2	81.2	2.5	2.6
West Germany	117.6	112.9	119.9	115.2	115.2	107.4	-6.8	3.5
Cyprus/Gibraltar/ Malta	1.5	1.8	2.0	2.2	2.5	2.4	-2.2	0.1
Total W.Europe	619.9	566.4	589.1	587.4	596.4	594.1	-0.4	19.2
Middle East	104.9	129.4	127.8	130.1	135.1	140.3	3.8	4.5
Africa	73.8	82.1	81.8	85.3	87.3	87.5	0.2	2.8
Japan	223.9	203.4	205.3	205.7	224.7	232.8	3.6	7.5
South East Asia	116.1	108.0	116.2	123.4	123.4	137.9	11.7	4.4
Australasia	33.2	30.8	32.2	33.0	34.3	35.6	3.6	1.1
South Asia	43.4	56.4	58.5	61.0	65.8	69.7	5.8	2.3
Of Which India	34.0	43.0	45.5	47.4	48.8	52.0	6.6	1.7
Total NCW	2255.5	2176.4	2245.6	2285.1	2374.4	2415.8	1.7	78.0
Centrally Planned Economies (CPEs)								
China	84.8	86.9	89.7	95.2	110.2	117.1	6.3	3.8
USSR	452.4	442.4	444.7	444.2	439.1	434.7	-1.0	14.0
Others	125.6	120.8	125.2	123.9	129.1	130.2	0.8	4.2
Total CPEs	662.8	650.1	659.6	663.3	678.4	682.0	0.5	22.0
TOTAL WORLD	2918.3	2826.5	2905.2	2948.4	3052.8	3097.8	1.5	100.0

* Inland demand plus international aviation and marine bunkers and refinery fuel and loss. $ Less than 0.05. P = Provisional

Source: BP Statistical Review of World Energy. June 1990.

Note : Figure for India Inserted.

Product-wise Consumption of Main Petroleum Products in the Non-Communist World (NCW) During 1981-89

(Million Tonnes)

COUNTRY	1981	1985	1986	1987	1988	1989	%age change 1989 over 1988	%age share of total 1989
1	2	3	4	5	6	7	8	9
USA								
Gasoline	297.9	305.4	314.3	324.1	333.8	334.1	0.1	42.2
Middle Distillates	199.2	204.8	213.5	216.1	229.7	231.3	0.7	29.2
Fuel Oil	110.6	67.3	78.2	68.6	75.7	73.3	-3.2	9.3
Others	138.3	144.2	145.3	154.6	154.2	153.9	-0.2	19.3
Total USA	746.0	721.7	751.3	763.4	793.4	792.6	-0.1	100.0
Canada								
Gasoline	31.3	27.7	27.3	27.8	26.5	26.9	1.7	35.0
Middle distillates	25.0	22.2	21.6	22.3	23.2	24.0	3.4	31.2
Fuel Oil	11.2	5.6	6.2	7.0	7.4	9.1	22.2	11.8
Others	14.2	13.0	13.0	14.3	16.6	16.8	1.2	22.0
Total Canada	81.7	68.5	68.1	71.4	73.7	76.8	4.2	100.0
Western Europe								
Gasoline	131.1	135.6	142.0	144.7	149.9	152.4	1.7	25.8
Middle distillates	220.7	223.9	234.8	236.7	239.9	235.5	-1.8	39.8
Fuel Oil	179.3	117.9	118.5	113.5	107.7	106.2	-1.4	17.9
Others	87.3	87.2	91.8	90.6	96.4	97.6	1.2	16.5
Total W. Europe	618.4	564.6	587.1	585.5	593.9	591.7	-0.4	100.0
Japan								
Gasoline	39.8	40.8	42.3	43.9	46.7	49.5	6.0	21.3
Middle distillates	60.6	63.6	66.6	68.9	76.8	77.5	3.5	34.1
Fuel Oil	91.2	62.4	59.2	56.9	61.8	62.9	1.9	27.0
Others	32.3	36.6	37.2	36.0	39.4	40.9	3.8	17.6
Total Japan	223.9	203.4	205.3	205.7	224.7	232.8	3.6	100.0
Australasia								
Gasoline	13.1	13.5	13.4	13.5	14.0	14.4	3.1	40.6
Middle distillates	9.8	10.4	10.9	11.5	12.1	12.7	4.9	35.7
Fuel Oil	5.6	2.9	2.6	2.5	2.5	2.6	2.4	7.3
Others	4.7	4.0	5.3	5.5	5.7	5.9	3.5	16.4
Total Australasia	33.2	30.8	32.2	33.0	34.3	35.6	3.6	100.0
Rest of NCW								
Gasoline	99.9	112.2	112.2	115.2	120.3	127.5	6.0	19.4
Middle distillates	191.9	223.9	227.1	210.4	254.0	266.4	4.9	40.5
Fuel Oil	184.6	165.5	169.4	170.4	178.3	189.2	6.1	28.7
Others	75.9	85.8	92.2	100.1	105.7	108.1	2.3	11.4
Total Rest of NCW	552.3	587.4	681.0	626.1	658.3	691.2	5.0	100.0
Total NCW								
Gasoline	613.1	635.2	652.2	669.2	691.2	704.8	2.0	29.1
Middle distillates	707.2	748.8	774.5	795.2	835.7	849.4	1.6	35.1
Fuel Oil	582.5	421.6	434.1	418.9	433.4	443.3	2.3	18.3
Others	352.7	370.8	384.8	401.1	418.0	423.2	1.2	17.5
Total NCW	2255.5	2176.4	2245.6	2285.1	2378.3	2420.7	1.8	100.0

P = Provisional.

Note: 'Gasolines' consists of aviation and motor gasolines and LDF (light distillate feedstock). 'Middle distillates' consists of jet and burning kerosene and gas and diesel oils (including marine bunkers). 'Fuel Oil' includes marine bunkers. 'Others consists of refinery gas, LPGs, solvents, petroleum coke, lubricants, bitumen, wax, refinery fuel and loss.

Source: BP Statistical Review of World Energy, June 1990.

WORLD CRUDE OIL & PETROLEUM PRODUCTS IMPORTS/EXPORTS - 1989

(Million Tonnes)

Country/Area	IMPORTS		EXPORTS	
	Crude	Products	Crude	Products
1.	2.	3.	4.	5.
U.S.A	286.5	107.6	6.8	32.8
Canada	17.8	7.5	30.7	15.2
Latin America	37.9	21.3	112.5	58.7
Western Europe	369.6	91.4	24.9	40.0
Middle East	0.5	2.2	581.6	81.9
North Africa	0.1	5.7	91.0	25.8
West Africa	0.5	3.7	106.7	8.4
East&Southern Africa	20.7	2.0	1.4	0.2
South Asia	21.4	12.9	1.5	2.0
South East Asia	91.1	41.8	49.9	32.5
Japan	178.1	46.4	-	2.7
Australasia	9.4	6.5	6.2	4.3
U.S.S.R., E. Europe & China	52.9	1.7	83.8	76.8
Destination not known*	10.5	30.6	-	-
Total World	1097.0	381.3	1097.0	381.3

* Includes changes in the quantity of oil in transit losses, minor movements not otherwise shown, unidentified military use, etc.

(i) Bunkers are not included as exports.

(ii) Regional descriptions are geographical.

(iii) Intra-area movements (for example between individual countries in Western Europe) are excluded.

SOURCE: BP Statstical Review of World Energy, June 1990.

WORLD OIL PRODUCTION, CONSUMPTION AND RELATIVE DEFICIT/SURPLUS. IN EACH REGION/COUNTRY DURING 1989 & 1973.

(Million Tonnes)

COUNTRY/REGION	1989 (P)				1973			
	Production	Consumption	Deficit Surplus	% extent of dependence.	Production	Consumption	Deficit Surplus	% extent of dependence.
1.	2.	3.	4.	5.	6.	7.	8.	9.
North Amerca (Including Canada)	514.0	869.4	- 355.5	- 40.9	621.3	901.7	-280.4	- 31.1
Latin America	346.4	248.5	97.9	39.4	272.0	160.3	+111.7	+ 69.7
West Europe	193.9	591.7	- 397.8	- 67.2	22.5	737.1*	-714.6	- 96.9
Middle East	814.0	140.3	673.7	480.2	1052.5	62.2	+990.3	+1592.1
Africa	287.3	87.5	199.8	228.3	290.0	49.5	+240.5	+ 485.9
South & South East Asia (including India)	280.3	582.5	- 302.2	- 51.9	84.3	81.8	+ 2.5	+ 3.1
India	34.2	53.8	- 19.6	- 36.4	7.2	23.7	- 16.5	- 69.6
Japan	0.6	232.8	- 232.2	- 99.7	0.7	269.1	-268.4	- 99.7
Australasia	26.5	35.6	- 9.1	- 25.6	0.7	32.9	- 14.4	+ 43.8
U.S.S.R.	607.5	434.7	172.8	39.8	429.0	325.7	+103.3	+ 31.7
Eastern Europe	19.9	105.2	- 85.3	- 81.1	18.8	99.7	- 80.9	- 81.1
China	138.3	117.1	21.2	18.1	54.8	53.8	+ 1.0	+ 1.9
T O T A L :	3089.8	3097.8	- 8.0	- 0.3	2871.6	2797.5	+ 74.1	+ 2.6

* - Inclusive of 1.4, 2.5 million tonnes consumption of Cyprus/Gibralter/Malta in 1973 and 1987 respectively.

P = Provisional.

SOURCE : B.P.Statistical Review of World Energy - June, 1990

EXPORTS OF CRUDE OIL REFINED PRODUCTS FROM OPEC MEMBER COUNTRIES.

(Million Tonnes)

	1970	1975	1980	1985	1986	1987	1988
1.	2.	3.	4.	5.	6.	7.	8.
(a) CRUDE OIL:							
Algeria	48.5	43.7	35.6	8.7	8.4	8.2	8.4
Ecuador	Neg.	7.3	5.5	8.4	8.6	5.3	7.5
Gabon	4.2	10.2	7.5	8.1	7.5	6.9	7.3
Indonesia	31.2	49.5	49.2	35.1	39.5	34.9	30.3
Iran, IR	164.8	232.6	39.7	78.1	72.4	85.2	84.5
Iraq	74.5	102.5	123.6	54.1	69.4	85.5	104.3
Kuwait	128.5	89.8	64.6	23.7	37.6	30.2	34.8
Libya	164.9	71.3	84.3	44.6	53.1	40.3	44.3
Nigeria	52.3	85.3	97.6	66.4	60.8	53.0	55.3
Qatar	18.1	21.3	23.2	14.0	15.3	12.7	15.1
Saudi Arabia	160.2	328.8	459.3	107.1	162.7	120.3	167.1
U.A.E.	38.7	82.8	84.5	48.7	56.4	62.3	66.9
Venezuela	121.2	73.3	64.1	41.1	47.2	51.1	50.3
TOTAL:	1007.1	1198.4	1138.7	538.1	638.9	595.9	676.1
(b) Refined Petroleum Products:							
Algeria	0.6	3.1	7.4	18.0	20.6	21.2	21.7
Ecuador	Neg	Neg.	1.2	0.7	0.9	0.8	1.3
Gabon	0.6	0.3	0.5	0.2	0.2	Neg	0.2
Indonesia	4.9	5.0	8.1	7.5	7.9	9.4	10.1
Iran, IR	10.4	10.7	7.0	2.0	0.5	0.2	0.4
Iraq	0.2	1.9	1.7	0.6	0.4	5.0	3.7
Kuwait	12.5	7.0	17.1	24.5	26.1	27.5	31.6
Libya	Neg	2.3	3.6	4.5	5.1	5.5	4.5
Nigeria	0.2	0.3	3.7	1.0	0.4	0.9	1.1
Qatar	-	-	0.1	1.4	1.8	1.6	1.7
Saudi Arabia	17.3	16.5	20.3	28.6	36.5	43.1	44.8
U.A.E.	-	-	1.0	4.6	5.6	5.7	5.8
Venezuela	51.5	30.6	28.1	26.4	28.2	24.6	31.8
TOTAL:	98.2	77.7	100.1	120.0	133.2	145.6	158.7

P = Provisional.

Note: Figures for earlier years revised based on BP conversion factor barrels/day = 49.8 tonnes/yrs.

SOURCE: Direct communication to the OPEC.

CRUDE OIL IMPORTS FROM OPEC MEMBER COUNTRIES BY REGIONS 1970-1987

(MILLION TONNES)

Import Region	1970r	1975r	1980r	1981r	1982r	1983r	1984r	1985r	1986	1987
North America	68.2	170.3	211.7	152.6	81.1	69.3	68.4	63.6	108.2	123.8
Of Which USA	46.5	135.8	189.0	136.2	71.8	63.8	63.7	59.1	100.9	94.3
Latin America	96.4	144.6	114.8	90.2	70.5	63.4	58.7	47.4	43.6	40.1
Western Europe	562.3	517.1	452.8	353.1	275.6	234.3	232.4	219.9	256.9	229.0
Of which:										
France	106.8	104.1	99.8	71.6	57.2	44.4	42.9	37.0	42.2	27.5
Germany FR	68.7	62.4	65.8	47.3	40.3	32.6	25.1	20.3	25.6	16.8
Italy	109.1	86.6	67.6	64.5	61.0	53.0	51.1	48.2	54.5	50.0
U.K.	106.9	80.6	34.4	24.2	18.5	12.5	9.7	10.4	12.0	8.7
Middle East	20.1	15.6	21.8	21.7	23.3	19.3	18.5	19.5	21.6	15.4
Africa	23.7	31.3	16.1	14.7	10.5	7.5	8.2	8.2	9.9	9.8
Asia and Far East	214.7	278.8	286.3	266.3	227.3	214.0	193.3	166.5	174.2	164.9
Of Which										
Japan	161.9	199.1	177.2	154.9	140.1	134.4	134.9	114.4	112.9	105.6
Oceania	15.2	8.8	10.7	10.4	9.1	5.4	4.8	2.3	2.5	3.8
CPEs	2.4	15.2	17.1	8.4	8.6	6.1	9.8	10.9	19.5	10.9
Unspecified	4.1	16.7	6.3	0.1	2.9	2.5	2.6	0.4	0.4	0.4
OECD AREA	807.6	895.3	852.4	671.0	505.9	443.3	440.6	400.4	480.6	462.3
TOTAL WORLD :	1007.1	1198.4	1137.6	917.5	708.9	621.8	596.8	538.4	636.4	598.3

P = Provisional

r = Revised., based on statistical reviews conversion factor = barrels/day 49.8 tonnes/yr.

Source = OPEC Annual Statistical Bulletin 1987.

COUNTRY-WISE OPEC CRUDE OIL EXPORT BY REGIONS : 1986

(Qty.'000'Barrel/day)

Country/Region	Developed Countries (OECD)					Developing Countries							
	North America	Western Europe	Ocea-nia	Japan	Total OECD or Developed World	Latin Amer-rica	Asia & Far East (Excl. Japan)	Middle East	Africa	Total Develop-ing Countries	CPES	Un-Speci-fied	Grand Total
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Algeria	10.0	138.5	-	-	148.5	9.0	-	0.5	-	9.5	9.6	-	167.6
2. Ecuador	50.4	-	-	-	50.4	56.6	66.5	-	-	123.1	-	-	173.5
3. Gabon	27.8	91.3	-	-	119.1	12.9	16.4	-	1.7	31.0	-	-	150.1
4. Indonesia	221.9	0.5	11.6	373.4	607.4	59.5	117.0	-	-	176.5	9.9	-	793.8
5. Iran, IR	117.8	621.2	-	220.6	959.6	25.0	244.4	95.0	35.0	399.4	95.0	-	1454.0
6. Iraq	81.2	762.3	-	163.0	1006.5	165.0	70.0	55.0	22.0	312.0	53.5	-	1372.0
7. Kuwait	19.4	275.3	7.1	204.5	506.3	-	205.5	25.0	1.0	231.5	4.1	-	741.9
8. S.P. Libyan,A	-	850.0	-	-	850.0	5.0	15.0	16.0	6.0	42.0	175.0	-	1067.0
9. Nigeria	454.2	663.9	-	-	1118.1	49.6	-	-	53.5	103.1	-	-	1221.2
10. Qatar	10.4	47.6	-	160.2	218.2	8.0	63.8	-	2.0	73.8	-	-	292.0
11. Saudi Arabia	657.3	1469.5	19.5	511.9	2658.2	180.0	550.0	236.0	65.0	1031.0	56.0	-	3745.2
12. U.A.E.	42.7	173.0	12.9	696.6	925.2	35.0	145.8	6.0	20.0	206.8	-	-	1132.0
13. Venezuela	414.1	173.0	-	-	587.1	287.8	-	-	-	287.8	-	7.4	882.3
TOTAL	2107.2	5266.1	51.1	2330.2	9754.6	893.4	1494.4	433.5	206.2	3027.5	403.1	7.4	13192.6
					73.9%					22.9%	3.1%	0.1%	100.0

SOURCE : OPEC Annual Statistical Bulletin- 1986

OIL REVENUES OF OPEC MEMBER COUNTRIES : 1974-1984.

(Billion US $)

OPEC MEMBER COUNTRIES	1974	1978	1979	1980	1981	1982	1983	1984
1.	2.	3.	4.	5.	6.	7.	8.	9.
Algeria	3.30	4.59	7.52	12.50	10.70	8.50	9.70	9.70
Ecuador	0.41	0.40	0.80	1.39	1.56	1.18	1.10	1.60
Gabon	0.17	0.50	0.90	1.80	1.60	1.50	1.50	1.40
Indonesia	1.37	5.20	8.10	12.86	14.39	12.70	9.66	10.40
Iran	17.82	19.30	20.50	13.50	9.30	17.60	20.00	16.70
Iraq	5.70	10.20	21.29	26.10	10.40	9.50	8.40	10.40
Kuwait	6.54	7.95	16.86	17.90	14.90	9.48	9.90	10.80
Libya	6.00	8.40	15.22	22.60	15.60	14.00	11.20	10.40
Nigeria	6.66	7.90	15.90	23.41	16.72	13.09	10.10	12.40
Qatar	1.45	2.20	3.08	4.80	4.72	3.15	3.00	4.40
Saudi Arabia	22.57	32.23	57.52	102.21	113.20	76.00	46.10	43.70
U.A.E.	5.54	8.20	10.86	19.50	18.70	16.00	12.80	13.00
Venezuela	9.27	7.32	11.96	16.34	17.40	13.54	13.50	13.70
TOTAL:	85.80	114.39	192.51	274.91	249.19	196.24	156.96	158.60

VALUE OF PETROLEUM EXPORTS FROM OPEC MEMBER COUNTRIES: 1970-1988

(Billion US $)

OPEC MEMBER COUNTRIES	1970	1975	1980	1983	1984	1986	1988
1.	2.	3.	4.	5.	6.	7.	8.
Algeria	0.68	4.30	12.65	9.47	9.19	4.82	4.99
Ecuador	Neg.	0.52	1.56	1.73	1.83	0.98	0.98
Gabon	0.06	0.92	1.74	1.65	1.68	0.72	0.78
Indonesia	0.44	5.31	15.59	13.56	12.48	5.50	5.18
Iran	2.36	19.63	13.29	19.22	12.25	7.18	8.17
Iraq	0.79	8.23	26.30	7.82	9.35	6.91	10.95
Kuwait	1.60	8.42	17.68	9.74	10.74	6.38	6.29
Libya	2.36	6.68	21.38	11.90	10.63	5.79	5.17
Nigeria	0.72	7.46	25.29	10.05	11.75	6.18	6.13
Qatar	0.23	1.76	5.40	3.11	4.39	1.72	1.71
Saudi Arabia	2.42	29.47	105.81	42.81	34.24	16.97	20.50
U.A.E.	0.48	6.76	19.56	12.23	12.98	7.45	7.35
Venezuela	2.37	8.32	18.25	13.84	12.15	6.71	8.16
TOTAL:	14.51	107.78	284.50	157.13	143.66	77.31	86.36

SOURCE: Direct communication to the OPEC.

OFFICIAL DEVELOPMENT ASSISTANCE FROM OECD AND OPEC MEMBERS: 1983-1988

COUNTRIES	AMOUNT (Million of U.S.$) 1983	1985	1987	1988	As percentage of donor G.N.P. 1983	1985	1987	1988
	(Million of US.$)							
1.	2.	3.	4.	5.	6.	7.	8.	9.
OECD:								
Italy	834	1098	2615	3183	0.20	0.26	0.35	. .
New Zealand	61	54	87	105	0.28	0.25	0.26	0.27
United Kingdom	1610	1530	1871	2645	0.35	0.33	0.28	0.32
Japan	3761	3797	7442	9134	0.32	0.29	0.31	. .
Austria	158	248	201	302	0.24	0.38	0.17	0.24
Finland	153	211	433	608	0.32	0.40	0.50	0.59
Australia	753	749	627	1101	0.49	0.48	0.33	0.46
Canada	1429	1631	1885	2342	0.45	0.49	0.47	0.50
Netherlands	1195	1136	2094	2231	0.91	0.91	0.98	0.98
Belgium	479	440	687	597	0.59	0.55	0.49	0.39
France	3815	3995	6525	6865	0.74	0.78	0.74	0.73
United States	8081	9403	8945	10141	0.24	0.24	0.20	0.25
Denmark	395	440	859	922	0.73	0.80	0.88	0.89
Germany(FR)	3176	2942	4391	4731	0.48	0.47	0.39	0.39
Norway	584	574	890	985	1.10	1.01	1.09	1.12
Sweden	754	840	1375	1529	0.84	0.86	0.88	0.87
Switzerland	320	302	547	617	0.31	0.31	0.31	0.32
Others	--	--	174	437				
TOTAL:	27558	29390	41648	48475				
OPEC								
Nigeria	35	45	30	13	0.05	0.06	0.13	0.04
Iran	10	-72	-21	0	0.01	-0.08	-2.10	0.00
Iraq	-10	-32	-22	-19	-0.09	-0.08	3.77	-0.04
Algeria	37	54	21	10	0.08	0.10	0.03	0.02
Venezuela	142	32	24	49	0.22	0.07	0.06	0.08
Libya	144	57	41	129	0.51	0.58	0.18	0.70
Saudi Arabia	3259	2630	2905	2098	2.86	2.86	3.72	2.70
Kuwait	997	771	316	108	3.73	3.25	1.23	0.42
U.A.E.	351	122	19	4	1.30	0.29	0.08	0.02
Qatar	20	8	4	8	0.39	0.18	0.08	0.15
TOTAL OAPEC	4798	3655	3284	2338	1.70	1.39	1.10	0.01
TOTAL OPEC	4985	3615	3317	2400	0.86	0.65	0.79	0.01

Source : 1. World Development Report 1989.
2. Direct Communication from OPEC.

LOAN ASSISTANCE FROM OPEC AND OTHER OIL SUPPLYING NATIONS:1980-81 TO 1989-90

(Rs. Crores)

	1980-81	1982-83	1985-86	1986-87	1987-88	1988-89	1989-90
	1	2	3	4	5	6	7
U.S.S.R.:							
Authorisation	485.7	--	1134.0*	2055.5*	1162.7	6210.0	2138.9
Utilisation	32.9	40.0	161.2	175.5	222.1	218.8	536.6
OPEC:							
Abu Dhabi Fund:							
Authorisation	--	--	--	--	--	--	--
Utilisation	2.0	--	--	--	--	--	--
OPEC Fund Loans							
Authorisation	39.8	29.3*	--	9.0*	10.4	14.6	--
Utilisation	3.4	37.4	4.7	7.4	24.5	29.0	15.9
U.A.E. Loans :							
Authorisation	--	--	--	--	--	--	--
Utilisation	--	--	--	--	--	--	--
Saudi Arab Fund: for Devep.							
Authorisation	--	--	51.6*	--	50.2	--	--
Utilisation	13.0	12.4	0.2	7.4	0.9	5.6	36.3
Kuwait Fund: for Arab Economic Develp.							
Authorisation	--	--	30.8*	--	--	36.1	--
Utilisation	8.6	25.5	53.4	23.0	10.8	1.8	5.4
Iraq-Loans:	7.0@						
Authorisation	82.9	--	--	--	--	--	--
Utilisation	0.7	--	--	--	--	--	--
Iran-Loans:							
Authorisation	--	--	--	--	--	--	--
Utilisation	17.3	--	--	--	--	--	--
TOTAL OPEC ASSISTANCE:							
Authorisation	122.7	29.3	82.4	9.0	60.6	50.7	--
Utilisation	45.0	75.3	58.3	37.8	36.2	36.4	57.6

* = Government account only.

@ = Grants received from contract for the construction of Indoor Stadium for Asian Games 1982.

SOURCE = Economic Survey, 1989-90

OFFICIAL SELLING PRICE OF KEY OPEC CRUDES/SINCE 1974

($/bbl)

CRUDE	Grav-ity	1974 Nov.1	1975 Jan.1	1975 Oct.1	1976 Feb.14	1976 June 1.	1976 July 1.	1976 Oct. 1.	1977 Jan.1	1977 July 1	1978 Jan.1	1978 Apr.1
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
ARABIAN/PERSIAN GULF CRUDES												
Saudia Arabia:												
Arab. Light	34	10.463		10.510					12.090	12.704		
Arab. Berri	39	11.114		11.874					12.280	13.225		
Arab. Medium	31	10.380		11.331		11.280			11.690	12.323		
Arab. Heavy	27	10.268		11.140		11.040			11.370	12.016		
Iran:												
Iran Light	34	10.67		11.62					12.81			
Iran Heavy	31	10.45		11.49	10.40	11.33b)			12.49			
Kuwait:												
Kuwait	31	10.365		11.300		11.230			12.370		12.270	
Abu Dhabi:												
Umm Shaif	37	10.868	10.645	11.695					12.280	13.040		
Murban	39	11.379	10.868	11.918					112.500	13.260		
Zakum	40	11.313	10.775	11.825					12.410	13.070		
Iraq												
Basrah	35	10.48		11.53			11.43		12.58			
Qutar												
Merine	36	10.80		11.66					13.00			
Dukhan	40	11.47		11.85					13.09			
Oman												
Oman Blend	34											
MEDITERRANEAN & AFRICAN CRUDES.												
Iraq												
Kirkukh	36						11.65		12.77			
Libya												
Bregs	40			12.32			12.62		13.92	14.20	13.97	13.85
Nigeria:												
Bonny Light	37			12.70			13.10	13.25	14.31	14.61c)	14.31	14.10
Bonny Medium	26						12.55	12.52	13.71		13.66	13.55
INDONESIAN CRUDE												
Indonesia:												
Minas	34	12.60		12.80					13.55			
VENEZULAN CRUDES												
Venezuela:												
Tia Zuana	26				11.12a)	11.22c)	11.32	11.65	12.72	12.82e)	12.70	
Tia Zuana	31				12.30a)			12.35	13.54			
Oficina	35				12.80a)				13.99			

a) = Effective Jan.1 b) = Effective June,9. c) = Effective Apr.1. e) = Effective Oct.1.

Contd..

OFFICIAL SELLING PRICE OF KEY OPEC CRUDES/SINCE 1974

($/bbl)

CRUDE	Gravity	EFFECTIVE DATES 1979								
		Jan.1	Feb.1	Apr.1	May 17	June 1.	July 1.	Oct.20.	Nov.1	Dec.17
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
ARABIAN/PERSIAN GULF CRUDES										
Saudia Arabia:										
Arab. Light	34	13.339		14.546		18.000			24.000	
Arab. Berri	39	14.060		16.470	17.870d)	21.324			24.721	
Arab. Medium	31	12.886		14.052		17.547			23.547	
Arab. Heavy	27	12.511		13.643		17.172			23.172	
Iran:										
Iran Light	34	13.45		16.57	17.17d)	18.47	22.00	23.50i)		28.80m)
Iran Heavy	31	13.06		16.04	16.64d)	17.74	19.90	22.71i)		27.77m)
Kuwait:										
Kuwait	31	12.830	14.030a)	15.800	16.40d)		19.490	21.431)	25.500	
Abu Dhabi:										
Umm Shaif	37	13.780	14.620	16.880	17.68		21.360		27.360	
Murban	39	14.100	15.120	17.100	17.90		21.560		27.560	
Zakum	40	14.010	15.030	17.010	17.81		21.460		27.460	
Iraq										
Basrah	35	13.21		15.60	16.20c)	16.94	21.23		27.23	
Qutar										
Merine	36	13.77	14.71	16.85	17.65		21.23		27.23	
Dukhan	40	14.03	15.05	17.04	17.84		21.42		27.42	
Oman										
Oman Blend	34	13.94								
MEDITERRANEAN & AFRICAN CRUDES.										
Iraq										
Kirkukh	36	13.41		15.82	16.42c)	17.16	21.25	22.18	24.18	26.18m)
Libya										
Bregs	40	14.69	15.37b) 16.07x)	18.25	18.95e)	21.26f)	23.45	26.22j)		29.95n)
Nigeria:										
Bonny Light	37	14.80		18.50	20.96e)		23.47		26.24k)	29.97
Bonny Medium	26	14.23		17.50	20.00e)		22.00		24.77k)	28.70
INDONESIAN CRUDE										
Indonesia:										
Minas	34	13.90		15.65	16.15e)	18.25g)	21.12		23.501)	25.50
VENEZULAN CRUDES										
Venezuela:										
Tia Zuana	26	13.36		15.76	16.36e)		19.31	19.48i)		23.48p)
Tia Zuana	31	14.22		16.70	17.30e)		20.90			24.90p)
Oficina	35	14.69		17.21	17.81		22.45			26.75p)

a) = Effective Feb.20. b) = Effective Feb.21. c) = Effective May 1. d) = Effective May 15.
e) = Effective May 16. f) = Effective May 27. g) = Effective June 15. h) = Effective July15.
i) = Effective Oct.1 j) = Effective Oct.15. k) = Effective Nov.6 l) = Effective Nov.17.
m) = Effective Dec.1 n) = Effective Dec.13. p) = Effective Dec.14 x) = Effective Mar.3.

Contd..

OFFICIAL SELLING PRICE OF KEY OPEC CRUDES/SINCE 1974

($/bbl)

CRUDE	Gravity	EFFECTIVE DATES 1980							
		Jan.1	Feb.1	Apr.1	May 1.	July 1.	Aug.1.	Sept.1.	Nov.1
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
					ARABIAN/PERSIAN GULF CRUDES				
Saudia Arabia:									
Arab. Light	34	26.000		28.00			30.00		32.00
Arab. Berri	39	27.520		29.52			31.52		33.52
Arab. Medium	31	25.454		27.454			29.454		21.454
Arab. Heavy	27	25.000		27.00			29.00		31.00
Iran:									
Iran Light	34	30.00	31.00	35.37					
Iran Heavy	31	29.27	30.27	34.37					
Kuwait:									
Kuwait	31	27.500			29.50	31.50			
Abu Dhabi:									
Umm Shaif	37	26.360			31.36			33.56	
Murban	39	29.560			31.56			33.56	
Zakum	40	29.460			31.46			33.46	
Iraq									
Basrah	35	27.96			29.96	31.96			
Qutar									
Merine	36	29.23			31.23	33.23			
Dukhan	40	29.42			31.41	33.42			
Oman									
Oman Blend	34					33.20c)	33.40		
					MEDITERRANEAN & AFRICAN CRUDES.				
Iraq									
Kirkukh	36	28.18			30.18	32.18			
Libya									
Bregs	40	34.67			36.67	37.00			
Nigeria:									
Bonny Light	37		34.18e)	34.69	36.69b)	37.00			
Bonny Medium	26		32.91e)	33.42	35.42b)	35.73			
					INDONESIAN CRUDE				
Indonesia:									
Minas	34	27.50			31.50d)				
					VENEZULAN CRUDES				
Venezuela:									
Tia Zuana	26	25.20	26.70a)		29.28d)	29.88			
Tia Zuana	31	26.90	28.70a)		32.40d)	33.00			
Oficina	35	28.75	33.75a)		34.25d)	34.85			

a) = Effective Feb. 6. b) = Effective May 22. c) = Effective June 30.
d) = Effective May 26 e) = Effective Feb. 4.

Contd..

OFFICIAL SELLING PRICE OF KEY OPEC CRUDES/SINCE 1974

($/bbl)

CRUDE	Grav-	EFFECTIVE DATES										
		1981			1982							
	ity	Jan.1	Jul.1	Oct.1	Nov.1.	Jan.1.	Feb.12.	Feb.23.	Mar.20	Apr.1	Jul.1	Aug.1
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
ARABIAN/PERSIAN GULF CRUDES												
Saudia Arabia:												
Arab. Light	34			34.00		34.00			34.00			
Arab. Berri	39			35.60		35.40			34.52			
Arab. Medium	31			33.00		32.40			32.40			
Arab. Heavy	27			31.50		31.00			31.00			
Iran:												
Iran Light	34	37.00			34.60	34.20	32.20	30.20			31.20	
Iran Heavy	31	36.00			33.40	32.30	30.30	38.30			29.30	
Kuwait:												
Kuwait	31	35.50			33.00	32.30						
Abu Dhabi:												
Umm Shaif	37	36.36			35.50	35.30			34.36			
Murban	39	36.56			35.70	35.50			34.56			
Zakum	40	36.46			35.60	35.40			34.46			
Iraq												
Basrah	35	35.96		33.96	34.71	33.46			34.21			
Qutar												
Merine	36	37.23			35.50	35.30			34.30			
Dukhan	40	37.42			35.65	35.45			34.49			
Oman												
Oman Blend	34	39.50	35.50	34.00		35.00		32.00c)	34.30			34.00
			36.00*	34.50*								
MEDITERRANEAN & AFRICAN CRUDES.												
Iraq												
Kirkukh	36	36.18		34.18		34.18			34.18			
Libya												
Bregs	40	41.00	40.00		37.50	37.00				35.50		
Nigeria:												
Bonny Light	37	40.00		36.00a)	36.50b)	36.50			35.50			
Bonny Medium	26	38.70		34.70a)	35.20b)	33.75			33.50			
INDONESIAN CRUDE												
Indonesia:												
Minas	34	35.00										
VENEZULAN CRUDES												
Venezuela:												
Tia Zuana	26	32.88			32.88							
Tia Zuana	31	36.00			35.00							
Oficina	35	38.06			37.06							

*) = Lower Price is for buy-back crude, higher is GSP for equity crude.
a) = Effective Aug.26. b) = Effective Oct.1. c) Effective March 1.

Contd..

OFFICIAL SELLING PRICE OF KEY OPEC CRUDES/SINCE 1974

EFFECTIVE DATES ($/bbl)

CRUDE	Gravity	EFFECTIVE DATES 1983 Feb.1	Mar.1	Mar.15	1984 Apr.1	Aug.10	Oct.18	1985 Dec.28	Jan.1	1986 Feb.1	July 1	Mar.31	July 1	Jan.1	1987 Feb.1	Spt.16
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
ARABIAN/PERSIAN GULF CRUDES																
Saudia Arabia:																
Arab. Light	34	30.00	39.00							28.00					17.52b)	
Arab. Berri	39	30.52	29.52						29.27	28.11					17.87	
Arab. Medium	31	28.40	27.40						27.65	27.40	27.20				16.92b)	
Arab. Heavy	27	27.00	26.00						26.50		26.00				16.27b)	
Iran:																
Iran Light	34			28.00				26.30	29.11	28.05					17.50f)	
Iran Heavy	31			26.90		27.10		26.20	27.55	27.35					16.89f)	29.30
Kuwait:																
Kuwait	31	28.30	27.30						27.55	27.30	27.10				16.67b)	
Abu Dhabi:																
Umm Shaif	37		29.36						29.11	28.05		12.30	8.25	17.65	17.72c)	
Murban	39		29.56						29.31	28.15		12.50	8.45	17.85	17.92c)	
Zakum	40		29.46					28.96	29.21	28.10		12.25	8.35	17.75	17.82c)	
Iraq																
Basrah	35			28.46						27.96				17.30		
Qutar																
Merine	36	30.00	29.30						29.05	28.05					17.67a)	
Dukhan	40	30.49	29.49						29.24	28.10					17.82a)	
Oman																
Oman Blend	34			29.00												
MEDITERRANEAN & AFRICAN CRUDES.																
Iraq																
Kirkukh	36			29.18						N.A.				N.A.		
Libya																
Brega	40	30.40@													18.67d)	
Nigeria:																
Bonny Light	37	30.00*					28.00			28.65					18.92e)	
Bonny Medium	26	28.00*					27.00			27.60					17.42	
INDONESIAN CRUDE																
Indonesia:																
Minas	34		29.53@							28.53					17.56g)	
VENEZULAN CRUDES																
Venezuela:																
Tia Zuana	26			27.88						27.60(1)		12.21(k)		16.72(m)		16.72
Tia Zuana	31			29.84						28.25(1)		13.70(k)		N.A.		17.62
Oficina	35			31.09						28.80(1)				N.A.		

@) = Effective Feb.23. * = Harbour fee of 2cts/bbl not included. 1) Effective Feb.10. (k) Effecive March 27.
a), b), c), d), e), f) & As agree by the 80th Meeting of the conference (December, 1986).
SOURCE : OPEC Annual Statistics Bulletin, 1987.

DEVELOPMENT OF CRUDE PETROLEUM PRICES (FOB) 1987-1990
(Official Selling Prices) (US $/bbl.FOB)

Crude	Country	January - March 1987	1988	1989	1990	April Spot Prices
Arab Light	Saudi Arabia	17.00	14.86	14.79	17.63	14.61
Arab Medium	Saudi Arabia	16.00	14.30	13.93	16.62	13.61
Arab Heavy	Saudi Arabia	15.33	13.53	13.54	16.38	13.14
Berri	Saudi Arabia	17.64	15.30	15.66	18.62	0.15
Iran Light	Iran	16.96	14.71	14.55	17.34	14.44
Iran Heavy	Iran	16.55	14.23	14.05	16.65	13.82
Basrah Light	Iraq	16.70	14.56	15.55	18.68	14.50
Basrah Medium	Iraq	0.00	0.00	0.00	0.00	0.00
Basrah Hevy	Iraq	0.00	0.00	0.00	0.00	0.00
Kirkuk	Iraq	17.30	14.73	15.81	18.87	14.66
Kuwait	Kuwait	16.50	14.23	13.71	16.52	13.57
Murban	Abu Dhabi	17.66	15.76	15.30	18.14	15.32
Dukhan	Qatar	17.49	15.21	14.98	17.48	15.11
Khafji	Neutral Zone	15.99	13.61	13.54	16.35	13.09
Es Sider	Libya	17.36	15.12	16.72	19.66	16.05
Bonny Light	Nigeria	17.97	15.93	17.28	20.36	17.10
Bonny Medium	Nigeria	18.04	15.84	17.24	20.38	16.36
Saharan	Algeria	18.02	15.72	17.49	20.40	16.79
Mandji	Gabon	16.67	13.57	15.37	18.05	13.71
Oriente	Ecuador	15.96	13.62	15.01	18.77	14.02
TJ Light	Venezuela	17.68	15.15	15.72	16.29	15.98
TJ Medium	Venezuela	16.72	13.92	14.43	15.98	14.11
Bachaquero	Venezuela	14.72	12.37	12.10	12.83	12.15
Sumatran	Indonesia	17.43	16.74	17.09	20.15	16.81
Attaka	Indonesia	18.27	16.93	17.73	20.07	17.94
OPEC Average		16.91	14.83	15.20	17.90	14.63
Persian Gulf		16.75	14.74	14.53	17.30	14.01
		COUNTRY EXPORT SHARES (percentages)				
Saudi Arabia		23.91	25.24	24.05	22.57	23.59
Iran		12.52	8.46	11.19	12.69	12.26
Iraq		11.45	15.79	15.04	12.98	12.40
Kuwait		6.98	6.87	7.08	7.84	7.98
UAE		7.93	7.02	8.40	8.31	8.52
Qatar		2.25	2.22	1.98	1.65	1.64
Neutralzone		2.35	1.46	1.88	1.49	1.72
Libya		6.55	6.47	5.82	5.09	5.42
Nigeria		7.07	7.11	6.81	8.07	7.27
Algeria		3.74	3.34	3.27	3.20	3.21
Gabon		0.90	0.97	0.85	0.89	1.18
Ecuador		0.65	1.44	1.27	1.40	1.20
Venezuela		8.62	8.75	7.90	7.99	8.62
Indonesia		5.20	4.85	4.46	5.84	4.99

Source: The World Bank/International Finance Corporation - OFFICE MEMORANDUM Dated February 13, 1990.

PETROLEUM PRODUCTS PRICE DEVELOPMENTS, 1990
(US Dollar Per Metric Ton, FOB)

	April-June 1989 a/	July-Sept. 1989 b/	Oct.-Dec. 1989 c/	Jan.-Mar. 1990 d/
Caribbean Market (Curacao)				
Gasoline	30.66	23.02	24.78	26.87
Kerosene	22.80	21.77	27.51	26.45
Gas Oil	22.42	22.43	25.82	25.19
Fuel Oil	14.49	15.37	15.25	13.49
Mid East Market (Bahrain)				
Gasoline	26.24	26.28	26.37	27.30
Kerosene	24.35	23.67	27.30	25.20
Gas Oil	22.05	22.03	24.57	24.57
Fuel Oil	14.10	12.83	13.85	13.10
Far East Market (Singapore)				
Gasoline	27.67	23.02	23.10	24.98
Kerosene	21.83	21.77	27.72	25.20
Gas Oil	22.89	22.43	24.78	25.62
Fuel Oil	15.25	14.63	14.75	15.25

a/ Mid-February quotations. b/ Mid-May quotations.
c/ Mid-August quotations. d/ Mid-November quotations.

FOB PRICE OF PETROLEUM PRODUCTS
(US Dollars/Barrel)

	Price*			
	1987	1988	1989	1990
Caribbean Market (Curacao)				
Gasoline	21.83	19.74	23.52	26.87
Kerosene	20.36	21.63	24.35	26.45
Gas Oil	19.73	20.16	22.26	25.19
Fuel Oil	15.99	12.74	12.49	13.49
Mid East Market (Bahrain)				
Gasoline	22.83	23.68	22.88	27.20
Kerosene	25.18	24.15	24.35	25.20
Gas Oil	23.93	23.31	22.05	24.57
Fuel Oil	15.08	10.10	10.59	13.10
Far East Market (Singapore)				
Gasoline	22.46	20.99	21.62	24.98
Kerosene	21.41	21.41	23.10	25.20
Gas Oil	21.42	20.58	22.89	25.62
Fuel Oil	15.74	12.74	11.23	15.25

* Mid-February quotations.

NATURAL GAS PRICES IN INDUSTRIAL/ DEVELOPED COUNTRIES OF THE WORLD

US $/10*7/ K.Cal (GCV)

Country	1982	1985	1987	1988	1989
		A. FOR INDUSTRIAL USE			
Australia	65.17	86.40	109.14	111.29	116.13
Austira	226.79	191.01	167.64	166.61	N.A.
Belgium	186.87	175.95	128.43	114.63	113.96
Canada	103.81	103.59	93.14	92.21	83.70
Finland	208.80	166.60	118.13	116.14	119.58
France	187.37	179.13	149.19	133.54	N.A.
Germany	207.00	185.00	153.10	141.49	N.A.
Ireland	616.48	268.36	296.13	304.99	282.23
Italy	175.84	164.37	118.20	89.78	N.A.
Japan	442.16	418.36	495.71	478.24	N.A.
Netheralands	172.61	156.85	116.34	N.A.	N.A.
New Zealand	115.74	95.60	165.62	215.30	N.A.
Spain	317.69	250.99	240.49	247.97	247.43
Switzerland	424.14	318.32	278.81	270.23	241.07
United Kingdom	159.11	145.97	153.32	163.86	N.A.
United States	149.10	152.18	113.27	114.04	111.73
		B. FOR HOUSEHOLD USE.			
Australia	N.A.	N.A.	N.A.	N.A.	N.A.
Austria	230.5	211.4	163.2	N.A.	N.A.
Belgium	193.0	152.8	106.2	101.8	106.6
Canada	83.9	N.A.	N.A.	N.A.	N.A.
Denmark	N.A.	N.A.	N.A.	N.A.	N.A.
Finland	N.A.	N.A.	N.A.	N.A.	N.A.
France	N.A.	N.A.	N.A.	N.A.	N.A.
Germany	172.6	160.8	162.6	N.A.	N.A.
Ireland	N.A.	109.5	120.4	99.5	N.A.
Italy	185.1	164.3	109.5	70.5	99.4
Japan	246.6	210.6	148.5	152.3	N.A.
Luxembourg	N.A.	N.A.	N.A.	N.A.	N.A.
Netherlands	192.1	172.1	123.6	N.A.	N.A.
New Zealand	N.A.	N.A.	N.A.	N.A.	N.A.
Spain	275.8	235.6	212.7	214.8	208.0
Switzerland	N.A.	N.A.	N.A.	N.A.	N..
United Kingdom	188.4	165.9	227.1	251.1	N.A.
United States	146.0	148.4	96.7	100.7	102.5

0.95 tonne of oil approximate 10*7 K. Calories of natural gas.
NA = Not available GCV. = Gross calorific value.
Source = International Energy Agency's "Energy Prices and Taxes" Fourth Quarter 1989.

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
		CARIBBEAN MARKET				
Latin America and Caribbean						
Antigua	St.Johns	Crude	124.25	111.23	108.79	129.18
		Gasoline	191.04	174.01	206.03	235.00
		Kerosene	164.09	175.11	196.12	212.70
		Gas Oil	149.16	153.36	168.36	190.10
		Fuel Oil	110.28	89.44	87.20	93.90
Argentina	La Plata	Crude	130.52	124.04	118.97	139.36
		Gasoline	203.84	192.29	217.37	246.30
		Kerosene	176.89	193.40	207.45	224.10
		Gas Oil	161.96	171.65	179.70	201.40
		Fuel Oil	123.08	107.72	98.54	105.20
Rahamas	Freeport	Crude	124.30	111.26	108.72	129.12
		Gasoline	193.12	176.97	207.94	236.90
		Kerosene	166.17	178.08	198.02	214.70
		Gas Oil	151.24	156.33	170.27	192.00
		Fuel Oil	112.36	92.41	89.10	95.80
Barbados	Bridgetown	Crude	124.37	111.47	108.95	129.31
		Gasoline	191.19	174.22	206.13	235.10
		Kerosene	164.23	175.32	196.21	212.80
		Gas Oil	149.30	153.57	168.46	190.20
		Fuel Oil	110.42	89.65	87.29	94.00
Belize	Belize	Crude	0.00	0.00	0.00	0.00
		Gasoline	192.82	176.62	207.71	236.70
		Kerosene	165.87	177.72	197.79	214.40
		Gas Oil	150.94	155.98	170.06	191.80
		Fuel Oil	112.06	92.05	88.87	95.60
Bermuda	Hamilton	Crude	0.00	0.00	0.00	0.00
		Gasoline	193.44	177.66	208.48	237.40
		Kerosene	166.48	178.77	198.56	215.20
		Gas Oil	151.55	157.02	170.80	192.50
		Fuel Oil	112.68	93.09	89.64	96.40
Brazil	Santos	Crude	129.08	122.46	116.25	136.44
		Gasoline	198.93	185.96	214.16	243.10
		Kerosene	171.98	187.06	204.24	220.90
		Gas Oil	157.05	165.32	176.48	198.20
		Fuel Oil	118.17	101.39	95.32	102.00

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Chile	Valparaiso	Crude	133.08	129.34	120.23	140.63
		Gasoline	149.95	191.43	218.79	247.70
		Kerosene	178.00	192.53	208.87	225.50
		Gas Oil	163.07	170.79	181.11	202.90
		Fuel Oil	124.19	106.86	99.95	106.70
Colombia	Barranquilla	Crude	123.83	109.88	107.87	128.23
		Gasoline	191.52	173.99	206.17	235.10
		Kerosene	164.57	175.09	196.25	212.90
		Gas Oil	149.64	153.34	167.49	190.20
		Fuel Oil	110.76	89.42	87.33	94.00
Costa Rica	Puerto Limon	Crude	124.30	11.718	108.95	129.34
		Gaspline	192.51	176.95	207.77	236.70
		Kerosene	165.55	178.06	197.85	214.50
		Gas Oil	150.62	056.31	170.09	191.80
		Fuel Oil	111.74	92.38	88.93	95.60
Dominican R.	Santo Domingo	Crude	123.72	109.99	107.95	128.34
		Gasoline	190.96	173.82	206.02	235.00
		Kerosene	164.00	174.92	196.10	212.70
		Gas Oil	149.07	153.18	168.34	190.10
		Fuel Oil	11.206	89.25	87.18	93.90
El Salvador	Cutuco	Crude	124.91	112.63	109.68	130.07
		Gasoline	198.41	182.84	213.40	242.40
		Kerosene	171.45	183.94	203.50	220.10
		Gas Oil	156.52	162.20	175.74	197.50
		Fuel Oil	117.65	98.27	94.58	101.30
Guatemala	Puerto-Barrios	Crude	123.31	111.24	108.69	129.08
		Gasoline	192.93	176.76	207.86	236.80
		Kerosene	165.97	177.87	197.94	214.60
		Gas Oil	151.04	156.12	170.19	191.90
		Fuel Oil	112.17	92.20	89.03	95.70
Haiti	Port au - Prince	Crude	0.00	0.00	0.00	0.00
		Gasoline	191.50	174.65	206.42	235.40
		Kerosene	164.55	175.76	196.50	212.10
		Gas Oil	149.62	154.01	168.74	190.50
		Fuel Oil	110.74	90.09	87.58	94.30
Honduras	Puerto - cortez	Crude	123.83	112.13	109.35	129.75
		Gasoline	194.48	178.54	209.27	238.20
		Kerosene	167.52	179.64	199.35	216.00
		Gas Oil	152.59	157.90	171.59	193.30
		Fuel Oil	113.72	93.97	90.43	97.10

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Jamaica	Kingston	Crude	124.08	110.78	108.35	128.74
		Gasoline	191.75	174.88	206.38	235.30
		Kerosene	164.79	175.99	196.46	213.10
		Gas Oil	149.86	154.54	168.71	190.40
		Fuel Oil	110.99	90.32	87.57	94.30
Nicaragua	Corinto	Crude	124.76	112.25	109.41	129.80
		Gasoline	198.57	183.09	213.70	242.70
		Kerosene	171.61	184.19	203.78	220.40
		Gas Oil	156.67	162.45	176.03	197.80
		Fuel Oil	117.80	98.52	94.87	101.60
Panama	Puerto Las Minas	Crude	124.19	112.51	108.52	128.91
		Gasoline	191.96	175.24	206.63	235.60
		Kerosene	165.01	176.34	196.71	213.30
		Gas Oil	150.08	154.60	168.96	190.70
		Fuel Oil	111.20	90.67	87.79	94.30
Surinam	Paramaribo	Crude	0.00	0.00	0.00	0.00
		Gasoline	192.79	176.31	207.13	236.10
		Kerosene	165.83	177.41	197.21	213.80
		Gas Oil	150.90	155.66	169.46	191.20
		Fuel Oil	112.03	91.74	88.29	95.00
Uruguay	Montevideo	Crude	128.00	118.86	113.70	134.09
		Gasoline	201.69	189.20	216.24	245.20
		Kerosene	174.74	190.30	206.32	223.00
		Gas Oil	159.81	168.56	178.56	200.30
		Fuel Oil	120.93	104.63	97.40	104.10
Africa South of Sahara						
Benin	Cotonou	Crude	0.00	0.00	0.00	0.00
		Gasoline	201.50	188.20	215.37	244.30
		Kerosene	174.54	189.30	205.45	222.10
		Gas Oil	159.62	167.56	177.70	199.40
		Fuel Oil	120.74	103.63	96.53	103.20
Cameroon	Douala	Crude	0.00	0.00	0.00	0.00
		Gasoline	203.36	190.73	211.04	240.00
		Kerosene	176.41	191.83	201.12	217.80
		Gas Oil	161.48	170.08	173.36	195.10
		Fuel Oil	122.60	106.16	92.20	98.90
Cape Verde	St. Vincent	Crude	0.00	0.00	0.00	0.00
		Gasoline	196.10	181.45	213.08	242.00
		Kerosene	169.14	182.55	203.16	219.80
		Gas Oil	154.21	160.81	175.41	197.10
		Fuel Oil	115.33	96.88	94.24	101.00

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Gambia	Banjul	Crude	0.00	0.00	0.00	0.00
		Gasoline	198.26	185.21	214.99	243.90
		Kerosene	171.31	186.31	205.07	221.70
		Gas Oil	156.38	164.57	177.31	199.10
		Fuel Oil	117.50	100.64	96.15	102.90
Ghana	Takoradi	Crude	129.30	121.46	115.41	135.79
		Gasoline	200.90	187.51	214.83	243.80
		Kerosene	173.95	188.61	204.91	221.50
		Gas Oil	159.05	166.87	177.16	198.90
		Fuel Oil	120.14	102.94	95.99	102.70
Guinea	Conakry	Crude	0.00	0.00	0.00	0.00
		Gasoline	200.51	186.71	215.02	244.00
		Kerosene	173.56	187.82	205.10	221.70
		Gas Oil	158.63	166.07	177.35	199.10
		Fuel Oil	119.75	102.14	96.19	102.90
Ivory Coast	Abidjan	Crude	129.65	122.02	115.70	136.06
		Gasoline	201.34	187.84	213.70	242.70
		Kerosene	174.39	188.94	203.78	220.40
		Gas Oil	159.46	167.20	176.02	197.80
		Fuel Oil	120.58	103.27	94.86	101.60
Liberia	Monrovia	Crude	129.60	121.91	115.85	136.24
		Gasoline	199.30	185.06	215.52	241.50
		Kerosene	172.34	186.16	202.60	219.20
		Gas Oil	157.42	164.42	174.85	196.60
		Fuel Oil	118.54	100.49	93.68	100.40
Mauritania	Nouadhibou	Crude	0.00	0.00	0.00	0.00
		Gasoline	197.93	184.25	212.54	241.50
		Kerosene	170.97	185.35	202.62	219.30
		Gas Oil	156.04	163.61	174.87	196.60
		Fuel Oil	117.16	99.68	93.70	100.40

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Senegal	Dakar	Crude	128.88	120.46	114.56	134.95
		Gasline	199.03	184.75	212.98	241.90
		Kerosene	172.08	085.85	203.06	219.70
		Gas Oil	157.15	164.11	175.31	197.10
		Fuel Oil	118.27	100.18	94.15	100.90
Sierra Leone	Freetown	Crude	129.88	122.43	115.95	136.34
		Gasoline	199.11	184.71	215.41	244.40
		Kerosene	172.15	185.81	205.49	222.10
		Gas Oil	157.22	164.07	177.73	199.50
		Fuel Oil	118.34	100.14	96.57	103.30
Togo	Kpeme	Crude	129.35	121.40	115.05	135.44
		Gasoline	201.60	188.20	218.95	247.90
		Kerosene	174.65	189.30	209.03	225.70
		Gas Oil	159.72	167.56	181.28	203.00
		Fuel Oil	120.84	103.63	100.11	106.80
Zaire	Banana	Crude	129.05	121.61	115.21	135.61
		Gasoline	204.90	194.36	214.02	243.00
		Kerosene	177.94	195.46	204.10	220.70
		Gas Oil	163.01	173.72	176.35	198.10
		Fuel Oil	124.13	109.79	95.19	101.90
Europe, Middle East, North Africa						
Gibraltar	Gibraltar	Crude	0.00	0.00	0.00	0.00
		Gasoline	198.59	185.63	215.45	244.40
		Kerosene	171.64	186.73	205.53	222.20
		Gas Oil	156.71	164.99	177.77	199.50
		Fuel Oil	117.83	101.06	96.61	103.30
Morocco	Mohammedia	Crude	126.83	117.35	113.75	134.14
		Gasoline	198.61	185.56	213.60	242.60
		Kerosene	171.66	186.67	203.68	220.30
		Gas Oil	156.73	164.92	175.92	197.70
		Fuel Oil	117.85	101.00	94.76	101.50
Portugal	Lisbon	Crude	126.90	117.37	113.06	133.45
		Gasoline	198.38	185.02	214.41	243.40
		Kerosene	171.43	186.12	204.49	221.10
		Gas Oil	156.50	164.38	176.73	198.50
		Fuel Oil	117.62	100.45	95.57	102.30
Spain	Huelva	Crude	126.79	117.29	113.12	133.51
		Gasoline	198.77	185.86	209.13	238.10
		Kerosene	171.82	186.96	199.21	215.80
		Gas Oil	156.89	165.22	171.46	193.21
		Fuel Oil	118.01	101.29	90.30	97.00

Contd...

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
		MIDDLE EAST MARKET				
Africa South of Sahara						
Djibouti	Djibouti	Crude	123.98	110.96	108.69	129.08
		Gasoline	202.50	212.53	204.49	241.80
		Kerosene	205.10	199.60	200.08	206.80
		Gas Oil	183.06	181.27	170.82	189.50
		Fuel Oil	107.00	76.26	78.44	95.30
Ethiopia	Assab	Crude	124.28	111.51	109.09	129.49
		Gasoline	203.36	213.66	205.74	243.00
		Kerosene	205.96	200.73	201.33	208.00
		Gas Oil	184.02	182.40	172.07	190.70
		Fuel Oil	107.87	77.39	79.69	96.50
Kenya	Mombassa	Crude	124.68	112.42	109.68	130.07
		Gasoline	204.54	215.52	207.92	245.20
		Kerosene	207.14	202.59	203.51	210.20
		Gas Oil	185.20	184.26	174.25	192.90
		Fuel Oil	109.05	79.25	81.86	98.70
Madagascar	Tamatave	Crude	125.67	113.85	110.69	131.09
		Gasoline	207.44	218.42	207.20	244.50
		Kerosene	210.05	205.50	202.79	209.50
		Gas Oil	188.10	187.16	173.54	192.20
		Fuel Oil	111.95	82.15	81.15	98.00
Mauritius	Port Louis	Crude	0.00	0.00	0.00	0.00
		Casoline	207.09	218.03	208.96	246.20
		Kerosene	209.69	205.10	204.55	211.30
		Gas Oil	189.75	186.76	175.29	193.90
		Fuel Oil	111.60	81.75	82.90	99.70
Mozambique	Maputo	Crude	125.63	114.59	111.18	131.57
		Casoline	207.32	219.93	213.38	250.70
		Kerosene	209.92	207.00	208.97	215.70
		Gas Oil	187.98	188.67	179.72	198.40
		Fuel Oil	111.83	83.66	87.33	104.20
Namibia	Walvis Bay	Crude	0.00	0.00	0.00	0.00
		Gasoline	212.86	228.02	208.07	245.30
		Kerosene	215.47	215.09	203.66	210.40
		Gas Oil	193.52	196.75	174.40	193.00
		Fuel Oil	117.37	91.74	82.02	98.90
Reunion	Reunion	Crude	0.00	0.00	0.00	0.00
		Gasoline	207.93	219.30	213.38	250.70
		Kerosene	210.54	206.38	208.97	215.70
		Gas Oil	188.60	188.04	179.72	198.40
		Fuel Oil	112.44	83.03	87.33	104.20
Seychelles	Port Victoria	Crude	0.00	0.00	0.00	0.00
		Gasoline	204.94	215.14	208.07	245.60
		Kerosene	207.55	202.22	203.66	210.40
		Gas Oil	185.60	183.88	174.40	193.00
		Fuel Oil	109.45	78.87	82.02	98.90

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Somalia	Mogadiscio	Crude	124.62	112.15	109.25	129.65
		Gasoline	204.38	214.95	204.99	242.30
		Kerosene	206.98	202.03	200.58	207.30
		Gas Oil	185.04	183.69	171.32	190.00
		Fuel Oil	108.89	78.68	78.94	95.80
South Africa	Cape Town	Crude	126.45	116.60	112.36	132.75
		Gasoline	209.75	224.03	204.84	242.10
		Kerosine	212.35	211.10	200.43	207.40
		Gas Oil	190.41	192.76	171.17	189.80
		Fuel Oil	114.26	87.75	78.78	95.60
Sudan	Port Sudan	Crude	124.45	112.00	109.52	129.92
		Gasoline	203.80	214.66	211.48	248.80
		Kerosene	206.47	201.74	207.17	213.80
		Gas Oil	184.53	183.40	177.81	196.40
		Fuel Oil	108.38	78.39	85.43	102.30
Tanzania	Dar Es Salam	Crude	124.85	112.77	109.90	130.30
		Gasoline	205.03	216.23	205.41	242.70
		Kerosene	207.63	203.30	201.33	207.70
		Gas Oil	185.69	184.97	171.75	190.40
		Fuel Oil	109.54	79.96	79.36	96.20
South Asia						
India	Bombay	Crude	124.01	110.75	108.57	128.96
		Gasoline	202.57	212.11	206.22	243.50
		Kerosene	205.17	199.19	201.81	208.50
		Gas Oil	183.23	180.85	172.55	191.20
		Fuel Oil	107.07	75.84	80.17	97.00
Pakistan	Karachi	Crude	123.46	109.66	107.89	128.28
		Gasoline	200.96	209.90	203.37	240.60
		Karosine	203.57	196.97	198.96	205.70
		Gas Oil	181.63	178.63	169.71	188.30
		Fuel Oil	105.47	73.62	77.32	94.20
Europe, Middle East, North Africa						
Cyprus	Larnaca	Crude	129.51	118.47	115.19	135.59
		Gasoline	214.57	227.33	210.19	247.50
		Karosene	217.18	214.41	205.78	212.50
		Gas Oil	105.23	196.07	176.52	195.20
		Fuel OIl	129.08	91.06	84.14	101.11
Creece	Salonica	Crude	129.90	119.25	115.73	136.13
		Gasoline	215.72	228.92	216.60	253.90
		Kerosine	218.32	215.99	212.19	218.90
		Gas Oil	196.38	197.66	182.93	201.60
		Fuel Oil	120.23	92.65	90.55	107.40
Isreal	Haifa	Crude	129.43	118.28	115.01	135.41
		Gasoline	214.34	226.95	218.33	255.60
		Kerosene	216.95	214.03	213.92	220.60
		Gas Oil	195.00	195.69	184.67	203.30
		Fuel Oil	118.85	90.68	92.28	109.10

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Jordan	Aqaba	Crude	124.90	113.14	110.10	130.49
		Gasoline	205.19	216.98	207.94	245.20
		Kerosene	207.79	204.06	203.53	21.200
		Gas Oil	185.85	185725	174.27	192.90
		Fuel Oil	109.70	80.71	81.88	98.70
Lebanon	Beirut	Crude	129.32	118.12	115.00	135.40
		Gasoline	214.01	226.62	214.93	252.20
		Kerosene	216.61	213.69	210.52	217.20
		Gas Oil	194.67	195.36	181.26	199.90
		Fuel Oil	118.52	90.35	88.87	105.70
Turkey	Istanbul	Crude	130.33	120.33	116.16	136.55
		Gasoline	216.98	231.13	216.20	253.50
		Kerosene	219.59	218.21	211.79	218.50
		Gas Oil	197.64	199.87	182.53	201.20
		Fuel Oil	121.49	94.86	90.14	107.00
Yemen,A.R.	Hodeidah	Crude	0.00	0.00	0.00	0.00
		Gasoline	203.06	213.32	210.86	248.10
		Kerosene	205.66	200.40	206.45	213.20
		Gas Oil	183.72	182.06	177.19	195.80
		Fuel Oil	107.57	77.05	84.81	101.60
Yemen PDR	Aden	Crude	123.96	110.97	108.74	129.13
		Gasoline	202.44	212.55	204.20	241.50
		Kerosene	205.05	199.63	199.79	206.50
		Gas Oil	183.10	181.29	170.53	189.20
		Fuel Oil	106.95	76.98	78.15	95.00
Yugoslavia	Rijeca	Crude	130.33	120.33	116.49	136.88
		Gasoline	216.98	231.13	212.02	249.30
		Kerosene	219.59	218.21	207.61	214.30
		Gas Oil	197.64	199.87	178.35	197.00
		Fuel Oil	121.49	94.86	85.97	102.80
FAR EAST MARKET						
South Asia						
Bangladesh	Chittagong	Crude	125.40	114.13	110.60	130.99
		Gasoline	199.08	189.05	200.27	229.20
		Kerosene	075.03	177.63	196.76	213.40
		Gas Oil	164.31	160.69	183.64	203.90
		Fuel Oil	111.20	93.66	89.35	116.30

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Burma	Rangoon	Crude	125.29	113.61	110.49	130.88
		Gasoline	197.95	187.04	192.30	221.30
		Kerosene	173.90	175.62	188.79	205.40
		Gas Oil	163.18	158.69	175.67	195.90
		Fuel Oil	110.08	91.65	81.38	108.30
India	Madras	Crude	125.04	113.02	110.06	130.45
		Gasoline	199.76	189.55	196.65	225.60
		Kerosene	175.72	178.13	193.14	209.80
		Gas Oil	166.99	161.19	180.02	200.30
		Fuel Oil	111.89	94.16	85.73	112.70
Sri Lanka	Cplombo	Crude	124.50	111.89	109.07	129.47
		Gasoline	199.48	189.26	193.01	222.00
		Kerosene	175.43	177.84	189.51	206.10
		Gas Oil	164.71	160.90	176.38	196.60
		Fuel Oil	111.61	93.87	82.09	109.00
East Asia and Pacific						
Hong Kong	Hong Kong	Crude	126.68	116.78	112.49	132.88
		Gasoline	198.94	188.51	192.26	221.20
		Kerosene	174.89	177.08	188.76	205.40
		Gas Oil	164.17	160.15	175.63	195.90
		Fuel Oil	111.06	93.12	81.34	108.30
Korea	Inchon	Crude	127.60	118.79	113.87	134.26
		Gasoline	201.54	192.44	191.99	221.00
		Kerosene	177.49	181.01	188.49	205.10
		Gas Oil	166.77	164.08	175.36	195.90
		Fuel Oil	113.67	97.04	81.07	108.00
Philippines	Manila	Crude	126.99	116.35	112.36	132.75
		Gasoline	198.67	187.65	1943.92	223.90
		Kerosene	174.62	176.23	191.41	208.00
		Gas Oil	163.90	159.29	178.29	198.50
		Fuel Oil	110.80	92.26	84.00	111.00
P.N.Guinea	Bougainville	Crude	0.00	0.00	0.00	0.00
		Gasoline	204.82	196.01	191.72	220.70
		Kerosene	180.77	184.59	188.22	204.80
		Gas Oil	170.05	167.65	175.09	195.30
		Fuel Oil	116.94	100.62	80.80	107.80
Thailand	Bangkok	Crude	126.17	115.71	111.78	132.18
		Gasoline	197.48	186.37	197699	226.60
		Kerosene	173.43	174.95	194.18	210.80
		Gas Oil	162.71	158.02	181.06	201.30
		Fuel Oil	109.60	90.98	86.77	113.70

Contd..

CIF PRICE OF CRUDE PETROLEUM AND PETROLEUM PRODUCTS
(US Dollars per Metric Ton)

Country	Discharge Port	Product	Price (*) 1987	1988	1989	1990
Vietnam	Hochimin	Crude	0.00	0.00	0.00	0.00
		Gasoline	199.11	18.119	190.50	219.50
		Kerosene	175.06	176.69	187.00	203.60
		Gas Oil	164.34	159.75	173.88	194.10
		Fuel Oil	114.24	92.72	79.59	106.50
Fiji	Suva	Crude	0.00	0.00	0.00	0.00
		Gasoline	209.30	201.86	191.76	220.70
		Kerosene	185.26	190.44	188.25	204.90
		Gas Oil	174.53	173.50	175.13	195.40
		Fuel Oil	121.43	106.47	80.84	107.80

(*) Late - November quotations.

Product Specifications:

Gasoline : 95 Ron
Kerosene : Regular
Gas Oil : 48-52 Diesel Index. 0.5% Sulphur in Mid East & Far East Markets.
Fuel Oil : Heavy High Sulphur.

Conversion Factors:

1 Metric Ton of Gasoline = 8.6 barrels
1 Metric Ton of Kerosene = 7.9 barrels
1 Metric Ton of Fuel Oil = 6.7 barrels
1 Metric Ton of Gas Oil = 7.4 barrels

1 barrel = 42 Gallons
1 Gallon (U.S) = 3.785 litres.

SOURCE The World Bank/International Finance Corporation
Office Memorandum dated February 13, 1990.

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June. 1980.

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
19.6.80	30.83	34.80	+ 3.97
3.7.80	31.30	34.34	+ 3.04
2.10.80	31.97	31.32	+ 1.15
7.11.80	31.76	38.78	+ 7.02
9.1.81	34.26	38.93	+ 4.67
6.2.81	34.83	37.02	+ 2.19
6.3.81	34.83	36.72	+ 1.89
3.4.81	34.83	35.90	+ 1.07
1.5.81	34.82	33.90	- 0.92
5.6.81	34.75	31.84	- 2.91
2.7.81	34.77	31.04	- 3.73
4.9.81	34.66 (34.32)	31.48	- 3.18
2.10.81	34.64 (34.32)	31.58	- 3.06
6.11.81	33.95	32.88	- 1.11
4.12.81	33.96	33.12	- 0.84
8.1.82	33.74	33.28	- 0.46
5.2.82	33.68	30.74	- 2.94
5.3.82	33.36	28.69	- 4.67
2.4.82	33.24	27.92	- 5.32
7.5.82	33.16	31.69	- 1.47
4.6.82	33.14	32.10	- 1.04
2.7.82	33.23	31.33	- 1.90
6.8.82	33.18	30.87	- 2.31
3.9.82	33.18	31.60	- 1.58
1.10.82	33.18	32.41	- 0.77
5.11.82	33.18	32.10	- 1.08
3.12.82	33.17	29.73	- 3.43
7.1.83	33.17	29.90	- 3.27
14.1.83	33.17	29.90	- 3.27
21.1.83	33.17	30.48	- 2.69
28.1.83	33.17	29.44	- 3.73
4.2.83	33.17	28.78	- 4.39
11.2.83	33.17	28.78	- 4.39
18.2.83	33.17	28.74	- 4.43
25.2.83	32.87	27.87	- 5.00
4.3.83	32.83	27.56	- 5.27
11.3.83	32.83	27.56	- 5.37
18.3.83	32.83	27.41	- 5.42
25.3.83	23.87	27.35	- 1.52
1.4.83	28.87	27.37	- 1.50
8.4.83	28.51	27.78	- 0.73
15.4.83	28.49	28.07	- 0.42
22.4.83	28.49	28.19	- 0.30
29.4.83	28.49	28.23	- 0.26
6.5.83	28.49	28.13	- 0.36
13.5.83	28.44	27.92	- 0.52
20.5.83	28.44	27.84	- 0.60
27.5.83	28.44	27.99	- 0.45
3.6.83	28.44	28.05	- 0.39

@= The weights given are based on each nation's production relative to OPEC total.

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June. 1980. (Contd..)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
10.6.83	28.44	28.04	- 0.40
17.6.83	28.44	28.14	- 0.30
24.6.83	28.44	28.22	- 0.22
1.7.83	28.44	28.20	- 0.24
8.7.83	28.44	28.20	- 0.24
15.7.83	28.44	28.40	- 0.04
22.7.83	28.44	28.42	- 0.02
29.7.83	28.46	28.46	- --
5.8.83	28.46	28.54	+ 0.08
12.8.83	28.47	28.53	+ 0.06
19.8.83	28.48	28.49	+ 0.01
26.8.83	28.48	28.42	- 0.06
2.9.83	28.48	28.40	- 0.08
9.9.83	28.48	28.37	- 0.11
16.9.83	28.48	28.27	- 0.21
23.9.83	28.48	28.33	- 0.15
30.9.83	28.48	28.22	- 0.26
7.10.83	28.48	28.03	- 0.45
14.10.83	28.48	28.28	- 0.20
21.10.83	28.48	28.26	- 0.22
28.10.83	28.48	28.19	- 0.29
4.11.83	28.48	28.08	- 0.40
11.11.83	28.48	28.00	- 0.48
18.11.83	28.48	27.90	- 0.58
23.11.83	28.48	27.79	- 0.69
2.12.83	28.48	27.93	- 0.55
9.12.83	28.48	27.87	- 0.61
16.12.83	28.48	27.78	- 0.70
23.12.83	28.48	27.74	- 0.74
30.12.83	28.48	27.83	- 0.65
6.1.84	28.48	27.91	- 0.57
13.1.84	28.48	27.95	- 0.53
20.1.84	28.48	27.97	- 0.51
27.1.84	28.48	28.06	- 0.42
3.2.84	28.48	28.08	- 0.40
10.2.84	28.48	28.03	- 0.45
17.2.84	28.48	28.02	- 0.46
24.2.84	28.48	28.03	- 0.45
2.3.84	28.48	28.06	- 0.42
9.3.84	28.48	28.12	- 0.36
16.3.84	28.48	28.04	- 0.44
23.3.84	28.48	28.02	- 0.46
30.3.84	28.48	28.04	- 0.44
6.1.84	28.48	27.91	- 0.57
13.1.84	28.48	27.95	- 0.53
20.1.84	28.48	27.91	- 0.51
27.1.84	28.48	28.06	- 0.42
3.2.84	28.48	28.08	- 0.40
10.2.84	28.48	28.03	- 0.45
17 ·2.84	28.48	28.02	- 0.46
24.2.84	28.48	28.03	- 0.45
7.3.84	28.48	28.03	- 0.45
16.3.84	28.48	28.02	- 0.46

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June. 1980. (Contd..)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
23.3.84	28.48	28.04	- 0.44
6.4.84	28.48	28.06	- 0.42
13.4.84	28.48	28.08	- 0.40
19.4.84	28.48	28.15	- 0.33
27.4.84	28.48	28.12	- 0.36
4.5.84	28.48	28.08	- 0.40
18.5.84	28.48	28.14	- 0.34
25.5.84	28.48	28.06	- 0.42
1.6.84	28.48	27.41	- 1.07
8.6.84	28.48	27.51	- 0.97
15.6.84	28.48	27.30	- 1.18
22.6.84	28.48	27.09	- 1.39
29.6.84	28.48	27.94	- 1.54
6.7.84	28.48	27.08	- 1.40
13.7.84	28.48	27.06	- 1.42
20.7.84	28.48	26.91	- 1.57
27.7.84	28.48	26.59	- 1.89
31.8.84	28.48	26.70	- 1.78
10.8.84	28.48	26.98	- 1.50
17.8.84	28.48	27.03	- 1.45
24.8.84	28.48	27.20	- 1.28
7.9.84	28.48	27.36	- 1.12
14.9.84	28.48	27.43	- 1.05
21.9.84	28.48	27.49	- 0.99
28.9.84	28.48	27.62	- 0.86
5.10.84	28.48	27.38	- 1.10
12.10.84	28.48	27.41	- 1.07
19.10.84	28.18	26.81	- 1.37
26.10.84	28.18	27.57	- 0.61
2.11.84	27.92	27.47	- 0.44
9.11.84	27.89	27.33	- 0.56
16.11.84	27.89	27.16	- 0.73
21.11.84	27.88	27.08	- 0.80
30.11.84	27.88	26.84	- 1.04
7.12.84	27.88	26.93	- 0.94
14.12.84	27.88	26.79	- 1.09
21.12.84	27.88	26.77	- 1.10
28.12.84	27.88	26.96	- 0.92
4.1.85	27.98	26.95	- 1.03
11.1.85	28.05	27.06	- 0.99
18.1.85	27.87	26.95	- 0.92
25.1.85	27.87	26.88	- 0.99
1.2.85	27.59	26.85	- 0.74
8.2.85	27.67	27.11	- 0.56
15.2.85	27.67	27.14	- 0.53
22.2.85	27.66	27.14	- 0.55
1.3.85	27.66	27.11	- 0.58
8.3.85	27.67	27.08	- 0.54
15.3.85	27.62	27.13	- 0.55
22.3.85	27.54	27.07	- 0.47
29.3.85	27.53	27.03	- 0.50

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June. 1980. (Contd..)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
4.4.85	27.53	27.00	- 0.53
12.4.85	27.53	26.98	- 0.55
19.4.85	27.53	26.93	- 0.61
26.4.85	27.49	26.81	- 0.68
2.5.85	27.49	26.61	- 0.88
10.5.85	27.48	26.38	- 1.10
17.5.85	27.40	25.94	- 1.46
24.5.85	27.40	25.84	- 1.56
19.7.85	27.40	25.88	- 1.52
2.8.85	27.21	25.99	- 1.22
9.8.85	27.24	26.03	- 1.21
16.8.85	27.35	26.22	- 1.13
23.8.85	27.39	26.31	- 1.08
30.8.85	27.42	26.57	- 0.85
6.9.85	27.42	26.69	- 0.73
13.9.85	27.37	26.50	- 0.87
20.9.85	27.37	26.50	- 0.87
27.9.85	27.37	26.76	- 0.61
4.10.85	27.41	26.52	- 0.49
11.10.85	27.41	26.88	- 0.53
18.10.85	27.43	26.89	- 0.54
25.10.85	27.35	26.79	- 0.56
1.11.85	27.32	29.79	- 0.52
8.11.85	27.33	26.85	- 0.48
15.11.85	27.33	27.02	- 0.31
22.11.85	27.31	27.19	- 0.12
29.11.85	27.00	27.02	- 0.32
6.12.85	27.34	26.32	- 0.95
13.12.85	27.28	26.28	- 0.98
20.12.85	27.26	26.32	- 0.94
27.12.85	27.26	26.33	- 0.93
3.1.86	27.26	26.16	- 1.02
10.1.86	27.18	25.12	- 1.89
24.1.86	27.01	20.27	- 5.98
31.3.86	26.25	19.01	- 6.90
7.2.86	25.91	17.80	- 8.01
14.2.86	25.81	16.86	- 8.60
21.2.86	25.46	16.25	- 9.00
28.2.86	24.25	13.94	- 10.40
7.3.86	24.34	13.18	- 11.06
14.3.86	24.24	13.27	- 11.02
21.3.86	24.20	12.11	- 11.96
28.3.86	27.07	27.03	- 0.56

Short-term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June. 1980. (Contd..)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
4.4.1986			
11.4.1986	22.74	11.62	- 11.12
18.4.1986	22.61	10.96	- 11.65
25.4.1986	22.56	10.86	- 11.70
2.5.1986	22.59	11.00	- 11.59
9.5.1986	22.93	12.28	- 11.65
16.5.1986	22.52	12.54	- 9.98
23.5.1986	22.59	12.90	- 9.68
30.5.1986	22.54	12.18	- 10.36
6.6.1986	22.45	11.30	- 11.15
13.6.1986	22.43	11.15	- 11.28
20.6.1986	22.39	10.91	- 11.48
27.6.1986	22.33	10.51	- 11.82
3.7.1986	22.05	9.87	- 12.18
11.7.1986	21.71	8.73	- 12.98
18.7.1986	21.62	8.23	- 13.39
25.7.1986	21.68	8.15	- 13.53
1.8.1986	21.52	8.16	- 13.36
8.8.1986	22.24	11.97	- 10.27
15.8.1986	22.52	12.42	- 10.10
22.8.1986	22.44	12.32	- 10.12
29.8.1986	22.59	12.77	- 9.82
5.9.1986	23.05	13.79	- 9.26
12.9.1986	23.02	13.56	- 9.46
19.9.1986	22.86	12.96	- 9.93
26.9.1986	22.93	13.02	- 9.91
3.10.1986	23.00	13.36	- 9.64
10.10.1986	22.80	13.36	- 9.44
17.10.1986	22.80	13.26	- 9.54
24.10.1986	22.83	13.32	- 9.51
31.10.1986	22.56	12.71	- 9.85
7.11.1986	22.58	13.82	- 8.76
14.11.1986	22.84	13.85	- 8.98
21.11.1986			
28.11.1986	22.77	13.80	- 8.97
5.12.1986	22.78	13.80	- 8.98
12.12.1986	22.77	13.80	- 8.97
19.12.1986	22.77	14.83	- 7.94
26.12.1986	23.30	15.91	- 7.40
2.1.1987	17.58	16.98	- 0.59
9.1.1987	18.01	17.28	- 0.73
16.1.1987	18.15	17.67	- 0.48
23.1.1987	18.15	17.64	- 0.52
30.1.1987	18.15	17.54	- 0.61
6.2.1987	18.15	17.44	- 0.71
13.2.1987			
20.2.1987	18.15	16.73	- 1.42
27.2.1987	17.94	16.41	- 1.53
6.3.1987	17.94	16.98	- 0.96
13.3.1987	17.94	16.86	- 1.08
20.3.1987	17.83	17.41	- 0.42
27.3.1987	17.83	17.48	- 0.35

Short-Term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June 1980 (Contd..)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
3.4.87	17.84	17.50	-0.34
10.4.87	17.84	17.47	-0.37
17.4.87	17.84	17.47	-0.37
24.4.87	17.87	17.31	-0.56
1.5.87	17.87	17.25	-0.62
8.5.87	17.87	17.35	-0.51
15.5.87	17.87	17.42	-0.45
22.5.87	17.87	17.42	-0.45
29.5.87	17.87	17.50	-0.37
5.6.87	17.87	17.54	-0.33
12.6.87	17.87	17.58	-0.29
19.6.87	17.87	17.64	-0.23
26.6.87	17.87	17.60	0.26
3.7.87	17.87	17.70	-0.17
10.7.87	17.87	18.40	0.53
17.7.87	17.87	18.40	0.53
24.7.87	17.87	18.19	0.33
31.7.87	17.87	18.13	0.26
7.8.87	17.87	17.87	0.01
14.8.87	17.87	17.49	-0.38
21.8.87	17.87	17.39	-0.47
28.8.87	17.87	17.39	-0.48
4.9.87	17.87	17.35	-0.52
11.9.87	17.87	17.35	-0.52
18.9.87	17.87	17.34	-0.53
25.9.87	17.87	17.34	-0.52
2.10.87	17.87	17.34	-0.53
9.10.87	17.87	17.40	-0.47
16.10.87	17.87	17.45	-0.42
23.10.87	17.87	17.57	-0.30
30.10.87	17.87	17.54	-0.32
5.11.87	17.87	17.09	-0.77
13.11.87	17.87	16.81	-1.06
20.11.87	17.87	16.84	-1.03
27.11.87	17.87	16.86	-1.01
4.12.87	17.87	16.86	-1.01
11.12.87	17.87	16.70	-1.17
18.12.87	17.88	14.48	-3.40
25.12.87	17.87	15.73	-2.14
8.1.88	17.88	15.73	-2.15
15.1.88	17.88	15.70	-2.18
22.1.88	17.88	15.81	-2.15
29.1.88	17.88	15.64	-2.24
5.2.88	NA	NA	NA
12.2.88	17.78	15.53	-2.25
19.2.88	17.61	14.94	-2.67
26.2.88	17.88	15.53	-2.17
4.3.88	17.88	13.61	-2.17
11.3.88	17.61	13.82	-3.79
18.3.88	17.88	13.82	-2.17
25.3.88	17.60	14.36	-3.24
31.3.88	17.60	14.45	-3.15

Short-Term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June 1980 (Contd..)

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
8.4.88	17.60	14.62	-2.98
15.4.88	17.60	15.68	-1.91
22.4.88	17.60	15.90	-1.70
29.4.88	17.60	15.57	-2.02
6.5.88	17.60	15.03	-2.57
13.5.88	17.60	15.03	-2.57
20.5.88	17.60	15.03	-2.57
27.5.88	17.60	15.03	-2.57
3.6.88	17.60	15.03	-2.57
10.6.88	17.60	15.03	-2.57
17.6.88	17.60	14.52	-3.08
24.6.88	17.60	13.92	-3.68
1.7.88	17.60	13.06	-4.54
8.7.88	17.60	13.65	-3.95
15.7.88	17.60	12.96	-4.63
22.7.88	17.60	14.41	-3.19
29.7.88	17.60	14.10	-3.49
5.8.88	17.60	13.47	-4.12
12.8.88	17.60	13.47	-4.13
19.8.88	17.60	13.54	-4.06
26.8.88	17.60	13.37	-4.24
2.9.88	17.60	13.05	-4.55
9.9.88	17.60	12.27	-5.33
16.9.88	17.51	12.07	-5.44
23.9.88			
30.9.88	17.51	11.08	-6.43
7.10.88	17.46	9.86	-7.60
14.10.88	17.46	10.66	-6.80
21.10.88	17.46	11.72	-5.74
28.10.88	17.46	10.97	-6.49
4.11.88	17.46	11.00	-6.46
11.11.88	17.46	11.12	-6.34
18.11.88	17.46	10.07	-7.39
25.11.88	-	-	-
2.12.88	17.46	12.61	-4.85
9.12.88	17.47	12.68	-4.79
16.12.88	17.47	13.33	-4.15
23.12.88	17.47	13.65	-3.82
30.12.88	17.47	13.78	-3.69
6.1.89	17.05	14.39	-2.66
13.1.89	17.05	14.84	-2.21
20.1.89	17.46	13.65	-3.81
27.1.89	17.47	15.69	-1.78
3.2.89	17.55	15.17	-2.38
10.2.89	17.55	15.17	-2.38
17.2.89	17.55	15.15	-2.40
24.2.89	17.55	15.59	-1.96
3.3.89	17.55	15.59	-1.96
10.3.89	17.55	15.77	-1.78
17.3.89	17.55	16.68	-0.87
24.3.89	17.55	17.54	-0.01
31.3.89	17.55	18.01	-0.45

Short-Term trend in weighted @ average Official Prices of OPEC CRUDE Vs. their Spot Assessment since June 1980

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
7.4.89	17.63	17.28	-0.35
14.4.89	17.48	17.78	0.30
21.4.89	17.50	18.79	1.30
28.4.89	17.50	18.57	1.07
5.5.89	17.75	17.25	-0.50
12.5.89	17.76	16.77	-0.99
19.5.89	17.76	17.00	-0.76
26.5.89	17.75	16.50	-1.25
2.6.89	17.75	16.52	-1.22
9.6.89	17.74	16.75	-1.00
16.6.89	17.73	15.77	-1.96
23.6.89	17.73	15.85	-1.88
30.6.89	17.73	16.74	-0.99
7.7.89	17.73	16.73	-1.00
14.7.89	17.71	16.39	-1.32
21.7.89	17.70	16.46	-1.24
28.7.89	17.70	15.62	-2.06
4.8.89	17.69	15.18	-2.51
11.8.89	17.69	15.16	-2.53
1.9.89	17.71	15.12	-1.79
8.9.89	17.71	16.14	-1.58
15.9.89	17.71	16.38	-1.33
22.9.89	17.68	16.19	-1.49
29.9.89	17.72	16.95	-0.77
6.10.89	17.72	16.95	-0.77
13.10.89	17.73	16.96	-0.77
20.10.89	17.72	17.49	-0.23
27.10.89	17.72	17.04	-0.68
3.11.89	17.72	17.15	-0.57
10.11.89	17.72	17.15	-0.57
17.11.89	17.72	17.07	-0.65
24.11.89	17.72	17.02	-0.70
1.12.89	17.72	16.90	-0.82
8.12.89	17.45	17.57	0.06
15.12.89	17.46	17.83	0.37
22.12.89	17.50	18.33	0.88
29.12.89	17.52	18.80	1.27
5.1.90	17.52	18.80	1.28
12.1.90	18.30	19.75	1.75
26.1.90	17.97	18.63	0.66
2.2.90	17.91	18.73	0.82
9.2.90	18.22	18.31	0.09
16.2.90	18.22	18.20	-0.03
23.2.90	18.22	18.03	-0.19
2.3.90	18.21	17.73	-0.48
9.3.90	17.81	17.64	-0.17
16.3.90	17.81	16.86	-0.94
23.3.90	17.78	16.40	-1.38
30.3.90	17.79	16.56	-1.24

Source: Platt's Oil Grams.

DEVELOPMENT OF CRUDE PETROLEUM PRICES (FOB) 1989-90

(Official Selling Prices) (US $/bbl.FOB)

Crude	Country	April-June 1989	July-Sept. 1989	Oct.-Dec. 1989	Jan-March 1990
Arab Light	Saudi Arabia	16.82	15.81	16.92	17.63
Arab Medium	Saudi Arabia	16.07	14.99	16.06	16.62
Arab Heavy	Saudi Arabia	15.49	14.32	15.68	16.38
Berri	Saudi Arabia	17.66	16.70	17.86	18.62
Iran Light	Iran	16.61	15.68	16.75	17.34
Iran Heavy	Iran	16.06	15.36	16.12	16.65
Basrah Light	Iraq	17.32	15.75	17.38	18.68
Basrah Medium	Iraq	0.00	0.00	0.00	0.00
Basrah Hevy	Iraq	0.00	0.00	0.00	0.00
Kirkuk	Iraq	17.56	15.90	17.55	18.87
Kuwait	Kuwait	15.77	14.92	16.00	16.52
Murban	Abu Dhabi	16.92	16.21	17.47	18.14
Dukhan	Qatar	16.60	15.77	16.90	17.48
Khafji	Neutral Zone	15.52	14.32	15.64	16.35
Es Sider	Libya	18.54	16.84	18.47	19.66
Bonny Light	Nigeria	19.22	17.54	19.26	20.36
Bonny Medium	Nigeria	18.90	17.14	19.27	20.38
Saharan	Algeria	19.28	17.53	19.23	20.40
Mandji	Gabon	17.29	15.54	17.12	18.05
Oriente	Ecuador	17.31	16.53	16.75	18.77
TJ Light	Venezuela	17.92	15.84	15.99	16.29
TJ Medium	Venezuela	17.19	15.61	15.77	15.98
Bachaquero	Venezuela	15.23	14.10	14.10	12.83
Sumatran	Indonesia	18.39	17.22	17.50	20.15
Attaka	Indonesia	19.19	18.01	18.93	20.07
OPEC Average		17.09	15.87	17.07	17.90
Persian Gulf		16.47	15.55	16.69	17.30

COUNTRY EXPORT SHARES

(percentages)

Saudi Arabia	23.44	23.01	22.57	22.57
Iran	10.93	10.68	12.69	12.69
Iraq	13.94	14.24	12.98	12.98
Kuwait	9.28	9.08	7.84	7.84
UAE	9.55	9.37	8.31	8.31
Qatar	1.85	1.90	1.65	1.65
Neutralzone	1.92	1.79	1.49	1.49
Libya	5.41	5.47	5.09	5.09
Nigeria	7.71	8.04	8.07	8.07
Algeria	2.85	2.94	3.20	3.20
Gabon	0.84	0.86	0.89	0.89
Ecuador	1.13	1.18	1.40	1.40
Venezuela	7.14	7.35	7.99	7.99
Indonesia	4.01	4.09	5.84	5.84

Source: The World Bank/International Finance Corporation - OFFICE MEMORANDUM Dated February 13, 1990.

Development of Spot Prices of Key OPEC Crude Oils since January 1986.

Month	Arab Light 34	Arab Heavy 27	Iran Light 33.9	Kuwait (Export)31	Iraq Basrah 34	UAE Murban 39.10	Qutar Dukhtar10
1986							
January	23.65	22.20	23.60	22.70	23.55	23.90	23.80
Feburary	15.88	16.50	15.88	14.88	15.88	16.19	16.00
March	13.13	11.25	13.13	12.13	13.13	13.44	13.40
April	11.17	9.83	11.17	10.33	11.17	11.50	11.50
May	12.30	10.80	12.30	11.30	12.30	12.55	12.55
June	10.67	9.67	10.83	10.17	10.67	10.92	10.92
July	8.63	7.63	8.63	7.75	8.63	8.88	8.88
August	11.69	10.70	12.05	7.00	12.05	12.30	12.30
September	13.63	12.44	13.63	12.83	13.63	13.88	13.88
October	14.00	13.00	14.00	13.25	14.00	14.25	14.13
November	13.75	12.25	13.75	14.63	13.75	14.00	14.00
December	15.19	13.63	15.19	16.95	NA	15.44	15.44
1987							
January	17.50	16.25	17.50	16.95	NA	17.72	17.72
February	16.69	15.69	16.69	16.19	NA	16.79	16.79
March	17.28	16.25	17.24	16.75	NA	17.41	17.41
April	17.38	16.38	17.38	16.88	NA	17.51	17.48
May	17.42	16.30	17.42	16.77	NA	17.54	17.52
June	17.44	16.15	17.44	16.61	NA	17.56	17.54
July	18.01	16.64	18.01	17.32	NA	18.18	18.18
August	17.79	16.44	17.71	17.00	NA	17.90	17.90
Sept.	17.36	16.56	17.39	16.48	NA	17.40	17.40
October	17.36	16.23	17.35	16.59	NA	17.65	17.65
November	17.35	16.15	16.26	16.55	NA	16.78	16.78
December	15.86	14.62	15.32	15.14	NA	15.66	15.66
1988							
January	15.63	14.20	15.68	15.55	15.20	16.45	
February	15.14	13.68	14.86	14.76	14.49	15.63	
March	13.70	12.53	13.70	13.97	13.41	15.06	
April	15.21	14.04	15.06	15.74	14.55	16.85	
May	15.16	13.95	15.00	15.23	14.25	16.61	
June	13.97	12.72	13.80	14.36	13.15	15.75	
July	13.50	12.25	13.44	14.09	12.74	15.48	
August	13.21	11.99	13.08	13.52	12.44	14.93	
September	11.56	10.34	11.54	11.90	10.88	13.41	
October	10.46	9.09	10.16	11.14	9.38	12.65	
November	10.92	9.62	10.72	11.66	9.87	13.42	
December	12.81	11.55	12.56	13.96	11.76	15.76	
1989							
January	14.61	13.36	14.38	15.75	13.55	17.49	
February	14.79	13.54	14.61	15.46	13.60	17.24	
March	16.28	15.03	16.03	17.36	15.16	18.93	

Source: Monthly OPEC Bulletins.

DEVELOPMENT OF SPOT PRICES OF MAJOR PETROLEUM PRODUCTS IN KEY TRADING CENTRES OF THE WORLD DURING 1988-89

(US Dollar/bbl)

Product/Type	As on				Change		
	21/10	20/1	21/4	21/7	21/10 -20/1	20/1 -21/4	21/4 -21/7
1	2	3	4	5	6	7	8
I. NAPHTHA							
1. NW Europe	15.21	18.22	20.77	17.99	3.01	2.55	-2.78
2. Mediterranean	14.13	16.46	18.73	17.20	2.33	2.27	-1.53
3. Carribbean	16.17	18.90	22.47	18.27	2.73	3.57	-4.20
4. Arabian/P.Gulf	12.83	15.49	19.58	16.23	2.66	4.09	-3.35
5. Singapore	13.05	15.50	19.85	16.50	2.45	4.35	-3.35
II. GASOLINE							
1. New York Reg.	23.10	22.79	31.82	23.10	-0.31	9.03	-8.72
Unl.	22.16	21.84	31.61	22.84	-0.32	9.77	-8.77
2. NWE Prem 0.15	22.10	21.56	34.80	22.76	-0.54	13.24	-12.04
Regu 0.15							
3. Med Prem 0.4	19.15	18.67	30.02	21.27	-0.48	11.35	-8.75
Regu 0.4	16.97	16.50	27.64	19.53	-0.47	11.14	-8.11
III. JET KEROSENE							
1. NW Europe	18.00	24.24	24.36	22.01	6.24	0.12	2.35
2. Mediterranean	16.86	22.77	23.09	20.80	5.91	0.32	-2.29
3. Carribbean	17.64	25.83	21.63	20.79	8.19	-4.20	-0.84
4. Arrabian/P.Gulf(a)	14.00	24.65	21.05	19.85	10.65	-3.60	-1.20
5. Singapore (a)	16.30	25.65	22.80	22.10	9.35	-2.85	-0.70
IV. GAS OIL							
1. NW Europe	16.69	20.84	22.12	20.98	4.15	1.28	-1.14
2. Mediterranean	15.75	19.77	20.31	20.04	4.02	0.54	-0.27
3. Carribbean	16.38	22.05	20.37	19.11	5.67	1.68	-1.26
4. Arabian/P.Gulf	12.90	22.75	20.65	19.45	9.85	-2.10	-1.20
5. Singapore	14.15	24.20	22.45	21.35	10.05	-1.75	-1.10
V. 1% RESIDUAL FUEL OIL							
1. NW Europe (3.5% S)	12.25	15.74	18.60	16.05	3.49	2.86	-2.55
2. Mediterranean (3.5% S)	11.47	15.27	18.45	15.50	3.80	3.18	-2.95
3. Carribbean (2.8% s)	8.25	11.13	13.75	13.63	2.88	2.62	-0.12
4. Arabian/P.Gulf (180 CST)	8.62	10.85	15.31	12.77	2.23	4.46	-2.54
5. Singapore (180 CST)	9.54	12.08	16.23	14.15	2.54	4.15	-2.08

a = Kerosene. NA = Not available. NR = Not reported

SOURCE Various issues of Oil Industry Development Report 1988-89.

DEVELOPMENT OF LOWEST POSTED PRICES OF POL PRODUCTS AT BANDAR MAHSHAR/QUOIN ISLAND

PRICE AS ON	U.S. Cent/U.S. Gallon						U.S. $ Barrel	
	Naphtha Whole (A-316)	Octane 93	Octane 87	Octane 83	Turbine Fuel	Kerosene	Diesel Index	Ind. Diesel	Light Fuel
1	2	3	4	5	6	7	8	9	10
1.1.70	-	9.0	7.9	7.1	9.5	8.9	6.6	2.62	1.42
1.1.71	-	9.0	7.9	7.1	9.5	8.9	6.6	2.70	1.50
1.1.72	-	9.9	8.7	8.0	10.4	9.8	7.5	3.20	1.95
1.1.73	-	10.2	8.9	8.3	10.7	10.1	7.8	3.32	2.07
1.1.74	-	17.3	N.R.	15.4	18.6	18.3	15.7	6.16	3.75
1.1.75	-	35.9	N.R	34.0	33.7	33.4	30.8	12.11	10.05
1.1.76	-	38.3	N.R	36.4	36.7	36.4	33.6	12.86	10.80
1.1.77	-	38.3	N.R.	36.4	36.7	36.4	33.6	12.86	10.50
1.1.78	-	41.2	N.R	39.0	39.6	39.2	36.5	14.35	11.85
1.1.79	-	44.0	41.5	40.5	43.5	42.5	40.5	N.R.	11.15
1.1.80	91.5*	79.3	77.0	76.0	77.5	76.5	73.0	N.R.	22.35
1.1.81	87.0**	106.3	104.0	102.5	110.0	105.0	102.0	N.R.	31.04
1.1.82	86.0**	107.8	105.5	104.0	113.5	112.5	106.5	N.R.	32.95
1.1.83	83.0**	100.8	98.5	97.0	110.0	107.0	103.0	N.R.	31.25
1.1.84	71.5**	91.0	86.0	85.0	88.0	87.5	83.0	N.R.	28.35
1.1.85	62.5	88.5	84.0	83.0	87.0	N.R.	77.0	N.R.	27.85
1.1.86	63.0	85.5	N.R.	80.0	86.0	N.R.	80.5	N.R.	25.50
1.1.87	34.0	45.5	41.0	40.0	53.0	N.R.	48.0	N.R.	12.40
1.1.88	38.5	52.2	46.2	42.2	57.5	N.R.	53.0	N.R.	15.50
1.1.89	32.0	52.2	46.2	42.2	64.0	N.R.	48.0	N.R.	13.50
1.1.90	40.0	60.0	NA	50.0	65.0	N.R.	56.5	N.R.	16.00

* = Ex-Ras Tanura
** = Ex-Kuwait
N.R. = Not reported
Source : Platt,s Oil Grams.

WORLD SURVEY OF SELECTED PETROLEUM PRODUCTS PRICES 1989

Country	US $ Exchange Rates in National Currencies	Gasoline (US$/litre)	Automotive Oil	Heavy fuel Oil for Industry (US $/tonnes)	Light Fuel Oil for House hold (US $/1000 litres)	for Industry use
1.	2.	3.	4.	5.	6.	7.
Australia	1.27	0.437	0.387	N.A.	N.A.	N.A.
Austria	13.23	0.729	0.502	N.A.	304.23	N.A.
Belgium	39.40	0.697	0.387	105.89	192.18	164.26
Canada	1.18	0.431	0.401	99.66	254.03	178.60
Denmark	7.31	0.937	0.254	137.62	563.89	221.48
Finland	4.29	0.822	0.500	152.23	230.19	193.36
France	6.38	0.812	0.470	119.63	312.66	N.A.
Germany	1.88	0.656	0.441	122.61	231.94	203.45
Greece	162.08	0.475	0.231	157.87	231.37	231.37
Ireland	0.71	0.870	0.596	139.86	325.41	240.42
Italy	1371.67	1.003	0.493	117.93	536.65	450.96
Japan	137.98	0.841	0.486	174.16	253.30	189.74
Luxembourg	39.40	0.572	0.316	114.37	204.67	192.97
Netherlands	2.12	0.782	0.350	151.58	292.05	N.A.
Newzeeland	1.67	N.A.	N.A.	N.A.	N.A.	N.A.
Norway	6.90	0.838	0.282	207.43	293.33	243.91
Portugal	157.10	0.792	0.484	150.29	502.86	484.24
Spain	118.40	0.646	0.430	121.39	282.94	252.62
Sweden	6.45	0.746	0.502	297.05	386.82	331.16
Switzerland	1.64	0.646	0.625	127.74	191.46	173.77
UK	0.61	0.662	0.074	119.75	190.79	176.69
USA	1.00	0.271	0.266	95.01	233.39	156.54

Source : International Energy Agency-Energy prices and taxes. Fourth quarter, 1989.

CONSUMER/RETAIL PRICES OF PETROLEUM PRODUCTS IN SELECTED DEVELOPED & DEVELOPING COUNTRIES OF THE WORLD DURING JANUARY-OCTOBER 1988

******

COUNTRY	Motor Spirit	Kero-sene	HSDO	LDO	F.O.	ATF	LPG (Domestic) (Kg.)	Exchange Rate adopted/used
	(----------Rs./Litre--------)							
1.	2.	3.	4.	5.	6.	7.	8.	9.
A. DEVELOPED COUNTRIES								
1. Japan (Tokyo)	11.89	4.67	6.94	NA	2.38	NA	25.17	1 Re = 10.09 Yen
2. New Zealand (Wellington)	5.80	0.07	4.70				2.35	1 NZ $ = Rs. 6.67
3. Yugoslaviya (Belgrade)	9.20		7.77	7.98	4.16	5.98	9.59	1 Re = 144.03 Dinar
4. Switzerland (Berne)	9.26		9.85	3.06	1.72			1 SF = Rs. 9.75
B. DEVELOPING COUNTRIES								
1. Argentina (Buneous Aires)	7.05	3.20	4.45	2.20		3.14	3.45	1 Re = 1 Austral
2. Afghanistan (Kabul)	6.60	2.80	2.80		2.80	4.30	8.00	1 Re = 5 Afs.
3. Bangla Desh (Dhaka)	5.90	3.10	3.10	2.85	2.10	3.90	4.30	1 Re = 2.23 TK
4. Brazil (Brasila)	15.11	7.94	7.63			5.22	5.31	1 Re = 13.10 Cruzados
5. Indonesia (Jakarta)	2.94	1.26	1.52	1.52	1.52		3.48	1 Re = 131 RP
6. India (New Delhi)	8.50	2.25	3.50	3.40			4.06	
7. Korea (Pyongyang)	6.92		4.86	3.92			5.88	
8. Rep. of Korea (Seoul)	7.29	3.30	3.18	3.23	1.72		7.77	1 Re = 57.30 Won
9. Malaysia (Kaula Lumpur)	4.34	2.64	2.34	3.24		1.69	5.88	1 Re = 0.226 M $
10. Tanzania (Dareslam)	8.15	3.15	3.65	3.45	2.60		5.30	1 Re = 5.3958 Tshs.
11. Thailand (Bangkok)	4.51	3.36	3.46	3.35	1.71		5.41	1 Re = 1.82 Baht.
12. Pakistan (Islamabad)	5.33	2.23	2.87	2.08	1.38		3.19	1 Re =1.34 Pak Re.
13. Srilanka (Colombo)	13.50	6.58	9.28	8.13			11.92	
14. Vietnam (Hanoi)	9.17		10.08	6.38				
India (New Delhi) price as on 1.4.90	9.84	2.25	4.08	3.40			4.06	

POSTED AIRFIELD PRICES OF JET A.I. FUEL AT MAJOR INTERNATIONAL AIRPORTS AS ON 1ST APRIL OF EACH YEAR

(U.S. $/U.S. Gallon)

Countries/ Port	Prices of Jet A.I.Fuel as on 1st April							
	1980	1984	1985	1986	1987	1988@	1989@@	1990@@
1.	2.	3.	4.	5.	6.	7.	8.	9.
Australia								
Perth	114.88	140.50	114.02	87.02	100.94	105.11	N.A.	N.A
Sydney	114.88	140.50	114.02	82.02	100.94	105.11	N.A.	N.A.
Bahrain	153.40	148.46	148.46	120.00	120.00	120.00	N.A.	N.A.
Belgium								
Brussels	159.00	135.00	128.00	105.00	115.00	115.00	N.A.	N.A.
Egypt								
Cairo	155.20	121.13	121.13	105.00	87.00	93.00	71.49	74.93
Ethopia								
Addisababa	156.06	151.45	150.32	146.66	115.29	96.09	N.A.	N.A.
France								
Paris	147.90	128.00	117.24	138.29	100.59	124.89	61.61	66.24
Germany								
Frankfurt	147.32	135.00	107.69	112.84	110.90	119.10	63.20	67.96
Holland								
Amsterdam	142.60	124.13	115.00	120.00	120.00	120.00	61.20	65.22
Italy								
Rome	165.00	135.00	135.00	135.00	125.24	138.71	61.58	68.48
Kenya								
Nairobi	144.00	168.10	168.10	157.61	163.00	160.00	N.A.	N.A.
Lebanon								
Beirut	185.00	165.00	165.00	165.00	100.00	100.00	N.A.	N.A.
Malaysia								
Kualalumpur	137.00	135.00	135.00	135.00	135.00	135.00	N.A.	N.A.
Mauritius								
Plaisance	140.00	145.00	126.00	125.00	60.00	74.46	N.A.	N.A.
Singapore								
Paya Iebar /Changi	137.00	128.50	128.50	128.50	90.00	90.00	51.34	63.10
Switzerland								
Geneva	155.73	129.76	105.58	118.94	118.93	118.15	62.90	67.93
U.A.E.								
Abu Dhabi	154.88	106.61	100.45	73.28	65.44	69.11	73.48	78.11
Sharjah/Dubai	154.88	147.60	147.58	119.93	99.98	109.95	N.A.	N.A.
UNITED KINGDOM								
London (H)	154.76	150.14	129.89	132.14	136.41	182.17	61.95	66.37
Karachi	123.28	175.50	175.50	175.50	175.50	154.50	N.A.	N.A.
Kuwait	113.96	106.07	98.15	82.44	70.59	72.73	N.A.	N.A.
New York(2)	112.00	83.50	77.75	59.87	49.10	60.80	62.96	64.98
Tehran(1)	100.96	122.13	122.13	116.23	135.44	N.A.	N.A.	N.A.
Tokyo								
Narita	118.96	97.00	95.00	86.76	60.00	100.00	78.31	85.65
Bombay	145.22	121.92	106.07	105.75	101.39	101.84	89.90	89.59
Delhi								
Palam	150.22	124.71	108.92	108.75	104.10	104.57	91.82	91.28

* = Less rebate 2.00 $/USG. (1) Monopoly Price (2) Air India Contract Price.
@ = As on Ist January, 1988.
@@= Relates to average price.

Wholesale Prices of OPEC's Representative Crudes in Current and Constant(1980)

Period	Wholesale price@ of OPEC's repres-entative crudes in current($/bbl.) S. Arabia (Ras Tanura)	Libya (ES Sider)	Venuzuela (Tia Zuana)	Index of consumer Prices Indl. countries 1980=100)	Price of crude oil 1980 ($/bbl) S.Arabia (Ras Tanura)	Libya (ES Sider)	Venuzuela (Tia Zuana)
1	2	3	4	5	6	7	8
1970	1.30	2.58	1.73	43.6	2.98	5.92	3.97
1971	1.65	3.17	2.21	45.9	3.59	6.91	4.81
1972	1.90	3.37	2.37	48.0	3.96	7.02	4.94
1973	2.70	4.80	3.56	57.7	4.68	8.32	6.17
1974	9.76	13.84	10.24	58.6	16.66	23.62	17.47
1975	10.72	11.59	10.89	65.1	16.47	17.80	16.73
1976	11.51	12.31	11.28	70.5	16.33	17.46	16.00
1977	12.40	13.87	12.42	76.4	16.23	18.15	16.26
1978	12.70	13.71	12.42	81.4	15.51	16.74	15.16
1979	17.26	21.06	16.77	89.4	19.31	23.56	18.76
1980	28.67	35.87	27.60	100.0	28.67	35.87	27.60
1981	32.50	39.83	32.03	109.9	29.57	36.24	29.14
1982	33.47	35.49	32.03	118.1	28.34	30.05	27.12
1983	29.31	30.89	28.05	124.1	23.62	24.89	22.60
1984	28.47	30.15	27.03	130.4	21.83	23.12	20.73
1985	27.28*	30.15	26.44	100.0	20.06	22.17	19.44
1986	13.65(s)	30.15	11.60	126.8	9.81	21.66	8.33
1987	17.52*	18.52*	N.A.	172.0	12.23	12.93	N.A.
1988	17.52*	18.52*	N.A.	271.4@	N.A.	N.A.	N.A.
1989	18.32	20.85	N.A.	N.A.	N.A.	N.A.	N.A.

* Estimated s = Spot Price @ = New series based on 1985=100
Source International Financial Statistics.

Wholesale price of OPEC's representatives crudes in terms of SDRs.

Period	Wholesale price of OPEC's representatives crudes in current ($/bbl.)			SDR/US $ exchange rates	Price in SDR s/bbl.		
	S.Arabia (Ras Tanura)	Libya (ES Sider)	Venuzuela (Tia Zuana)		S.Arabia (Ras Tanura)	Libya (ES Sider)	Venuzuela (Tia Zuana)
1.	2.	3.	4.	5.	6.	7.	8.
1970	1.30	2.58	1.73	1.00000	1.30	2.58	1.73
1971	1.65	3.17	2.21	0.99702	1.65	3.16	2.20
1972	1.90	3.37	2.37	0.92105	1.75	3.10	2.18
1973	2.70	4.80	3.56	0.83883	2.26	4.03	2.99
1974	9.76	13.84	10.24	0.83150	8.12	11.51	8.52
1975	10.72	11.59	10.89	0.82362	8.83	9.55	8.97
1976	11.51	12.31	11.28	0.86616	9.97	10.66	9.77
1977	12.40	13.87	12.42	0.85652	10.62	11.88	10.64
1978	12.70	13.71	12.42	0.79872	10.14	10.95	9.92
1979	17.26	21.06	16.77	0.77399	13.36	16.30	12.98
1980	28.67	35.87	27.60	0.76833	22.03	27.56	21.21
1981	32.50	39.83	32.03	0.84806	27.56	33.78	27.16
1982	33.47	35.49	32.03	0.90579	30.32	32.15	29.02
1983	29.31	30.89	28.05	0.93545	27.42	28.90	26.24
1984	28.47	30.15	27.03	0.97560	27.78	29.41	26.37
1985	27.28 *	30.15	26.44	0.98489	26.87	29.69	26.04
1986	13.65 (s)	30.15 *	11.60	0.85239	11.64 (s)	25.70	9.89
1987	17.52*	18.52	N.A.	0.77335	13.55	14.32	N.A.
1988	17.52*	18.52	N.A.	0.74409	13.04	13.78	N.A.
1989	18.32	20.85	N.A.	0.78018	N.A.	N.A.	N.A.

* = Estimated s = Spot Price

Source: = International Financial Statistics.

WORLD TANKER FLEET BY FLAG 1981 TO 1986

(Million dwt)

FLAG	1981	1982	1983	1984	1985	1986	% ages change 1986 over 1985	% ages share of total 1986
Liberia	91.6	84.4	76.4	71.8	63.0	60.9	- 3.3	25.3
Panama	14.4	15.9	15.0	14.9	16.8	17.9	+ 6.5	7.4
USA	16.4	16.8	16.5	15.6	15.2	15.3	+ 0.7	6.3
France	13.2	11.6	10.4	8.9	5.6	4.6	-17.9	1.9
Greece	27.0	23.7	21.1	19.1	18.3	18.5	+ 1.1	7.7
Norway	24.4	21.2	18.9	15.7	8.5	5.2	-38.8	2.2
United Kingdom	21.3	17.6	15.3	13.3	12.4	11.7	- 5.6	4.8
Other Western Europe	36.2	35.1	34.6	36.1	32.6	29.8	- 8.6	12.4
Japan	29.7	28.5	26.3	24.9	23.3	19.9	-14.6	8.3
Others	35.4	39.0	39.1	38.5	40.2	46.6	+15.9	19.3
Total NCW	309.6	293.8	273.6	259.2	235.9	230.4	- 2.3	95.6
Centrally-Planned Economies (CPEs)	10.6	9.9	9.6	10.9	10.9	10.6	- 2.9	4.4
Total World	320.2	303.7	283.2	269.7	246.8	241.0	- 2.4	100.0

SOURCE: B.P. Statistical Review of the World Energy.

WORLD TANKER FLEET BY SIZE 1981 TO 1986

(Million dwt)

Size of Tanker	1981	1982	1983	1984	1985	1986	% ages change 1986 over 1985	% ages share of total 1986
15-25 000 dwt	13.8	13.5	13.0	12.8	12.3	12.4	+ 0.8	5.2
25-45 000 dwt	26.0	27.2	27.4	26.3	25.8	26.3	+ 1.9	10.9
45-65 000 dwt	16.6	16.1	15.3	15.7	15.0	14.2	- 5.3	5.9
65-125 000 dwt	55.4	51.8	48.4	46.2	44.4	46.6	+ 5.0	19.3
125-200 000 dwt	31.2	30.2	28.8	28.9	28.4	27.5	- 3.2	11.4
200-320 000 dwt	146.5	134.5	120.4	111.6	94.9	90.6	- 4.5	37.6
320 000 dwt and over	30.7	30.4	29.9	28.2	26.0	23.4	-10.0	9.7
Total World	320.2	303.7	283.2	269.7	246.8	241.0	- 2.4	100.0

WORLD TANKER FLEET TONNAGE SCRAPPED 1981 TO 1986

(Million dwt)

Size of Tanker	1981	1982	1983	1984	1985	1986	% ages change 1986 over 1985	% ages share of total 1986
10-25 000 dwt	0.5	0.9	0.8	1.2	0.7	0.3	-57.1	2.3
25-45 000 dwt	0.8	1.2	1.1	1.5	1.2	0.7	-41.7	5.4
45-65 000 dwt	0.9	3.6	4.2	2.7	2.2	1.5	-31.8	11.5
80-100 000 dwt	0.3	1.6	1.2	0.9	2.0	0.5	-75.0	3.9
100-160 000 dwt	0.7	1.6	1.0	0.7	1.1	1.0	- 9.1	7.7
160 000 dwt and over	8.8	12.7	15.2	11.1	19.3	9.0	-53.4	69.2
Total World	12.0	21.6	23.5	18.1	26.6	13.0	-50.9	100.0

SOURCE : B.P.Statistical Review of the World Energy June 1987.

INTER-AREA TOTAL OIL MOVEMENTS 1989

(Million Tonnes)

From \ To	U.S.A.	Canada	Latin America	W.Europe	Africa	South East Asia	Japan	Australasia	Rest of World	Destination not known*	Total
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
USA	-	4.5	16.5	7.8	0.1	2.7	5.9	1.2	0.5	0.4	39.6
Canada	45.0	-	-	0.1	-	0.3	0.2	-	-	0.3	45.9
Latin America	126.1	4.3	-	28.7	-	0.6	8.2	0.1	-	3.2	171.2
Western Europe	28.7	9.8	0.3	-	6.0	1.4	0.3	0.5	3.5	14.4	64.9
Middle East	94.1	3.4	20.5	195.5	15.5	127.5	150.0	9.6	47.4	-	663.5
North Africa	14.3	-	-	93.5	-	0.6	0.8	-	7.6	-	116.8
West Africa	59.8	3.1	-	39.6	9.0	3.0	0.6	-	-	-	115.1
East & Southern Africa	1.3	-	-	0.3	-	-	--	-	-	-	1.6
South Asia	1.7	-	-	0.1	-	1.3	0.2	0.2	-	-	3.5
South East Asia	13.4	-	2.3	0.3	1.4	0.6	42.2	4.3	6.5	11.4	82.4
Japan	0.1	-	-	-	-	2.4	--	-	0.2	-	2.7
Australasia	1.7	-	-	-	-	4.5	1.3	-	0.5	2.5	10.5
USSR, E.Europe & China	7.9	0.2	19.6	95.1	0.7	22.3	14.8	-	89.8	8.9	259.3
Total Imports	394.1	25.3	59.2	461.0	32.7	167.2	224.5	15.9	156.0	41.1	1577.0

* Includes changes in the quantity of oil in transit, transit losses, minor movements not otherwise shown, unidentified military use, etc.

SOURCE: B.P.Statistical Review of World Energy June 1990.

WORLD PRIMARY ENERGY CONSUMPTION BY FUEL - 1989*.

(Million Tonnes Oil Equivalent)

Country/Area	Oil	Natural Gas	Coal	Nuclear Energy	Hydro-Electric	Total
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA						
USA	792.2	487.6	473.8	142.2	71.6	1967.8
Canada	76.8	53.7	33.3	18.1	62.4	244.3
Total North America	869.4	541.3	507.1	160.3	134.0	2212.1
WESTERN EUROPE:						
Austria	10.4	4.6	3.1	-	8.5	26.6
Belgium & Luxembourg	23.1	9.3	9.4	9.1	0.1	51.0
Denmark	9.1	1.7	5.6	-	-	16.4
Finland	11.0	1.9	3.2	4.0	3.2	23.8
France	88.4	24.4	18.7	59.9	10.0	201.4
Greece	13.6	0.1	7.9	-	0.5	22.1
Iceland	0.7	--	0.1	-	0.9	1.7
Republic of Ireland	4.0	1.4	3.5	-	0.2	9.1
Italy	94.3	37.0	14.3	-	9.4	155.0
Netherlands	34.3	30.8	8.2	1.0	-	74.3
Norway	8.9	-	0.5	-	23.4	32.8
Portugal	9.3	-	2.9	-	1.0	13.2
Spain	46.6	4.5	19.2	12.5	3.8	86.6
Sweden	15.4	0.4	2.3	17.5	19.8	55.4
Switzerland	11.9	1.3	0.3	5.6	7.9	27.0
Turkey	22.1	0.3	24.6	-	4.5	51.5
United Kingdom	81.2	44.9	61.4	15.0	1.4	203.9
West Germany	107.4	44.9	73.2	33.1	3.7	262.3
Total Western Europe	591.7	207.5	258.4	158.2	98.3	1314.3
Australasia	35.6	21.6	41.8	-	9.5	108.5
Japan	232.8	42.0	75.4	46.3	20.9	417.4
South East Asia	162.9	22.9	94.0	18.8	17.6	316.2
Syprus/Gibralter	2.4	-	0.1	-	-	2.5
Latin America	248.5	80.4	22.6	1.3	100.7	453.5
Middle East	140.3	85.0	2.6	-	2.6	230.5
Africa	87.5	31.2	75.5	2.7	19.0	215.9
South Asia	69.7	22.2	100.8	1.6	21.3	215.6
Total NCW	2220.8	1054.1	1178.3	389.2	423.9	5486.3
Centrally-Planned Economies (CPEs):						
China	117.1	12.9	504.9	-	29.6	664.5
USSR	434.7	563.3	288.6	45.4	57.4	1389.4
Others	105.2	77.5	259.5	16.0	15.3	473.1
Total CPEs	657.0	653.7	1053.0	61.4	102.3	2527.0
Total World	3097.8	1707.8	2231.3	450.6	526.2	8013.3

@ = Estimated on the basis of financial year (despatches of coal, and Natural Gas) + =less than 0.05.

* = Primary energy comprises commercially traded fuels only. Excluded therefore are fuels such as wood, peat and animal waste, which, though important in many countries, are unreliably documented in terms of consumption statistics.

SOURCE: B.P.Statistical Review of World Energy June 1990.

ESTIMATED PER CAPITA PRIMARY ENERGY CONSUMPTION-SOME INTERNATIONAL COMPARISONS (1988).

(Kgm.Oil Equivalent)

Country/Area	Oil	Natural Gas	Coal	Neclear Energy	Water Power	Total
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA	3215	1915	1875	594	491	8090
U.S.A.	3254	1902	1933	580	271	7940
Canada	2846	2039	1332	718	2560	9494
Western Europe	1455	495	631	370	273	3224
Austria	3195	579	395	-	1132	3500
Belgium &Luxembourg	2369	816	903	932	10	5029
Denmark	1863	314	1353	-	-	3529
Finland	2245	286	735	939	673	4878
France	1547	424	308	984	282	3545
Greece	1370	10	740	-	60	2180
Iceland	2000	-	333	-	3000	5333
Republic of Ireland	1083	333	972	-	56	2444
Italy	1558	594	265	-	190	2646
Netherlands	2347	2082	571	61	-	5061
Norway	2190	-	119	-	5571	7881
Portugal	853	-	225	-	98	1176
Spain	1552	902	399	291	209	2142
Sweden	1940	48	321	2202	2286	6798
Switzerlands	1908	169	46	846	1446	4415
Turkey	424	6	430	-	86	945
United Kigdom	3192	842	1158	237	25	3654
West Germany	1882	714	1199	529	67	4392
Asia						
China	103	12	436	-	26	577
Japan	1840	321	624	355	155	3296
India	66	10	160	(19)		255
South Korea	824	64	639	238	21	1786
Australasia	1759	949	1933	-	477	5118
Australia	1846	883	2228	-	210	5167
New Zealand	1333	1273	485	-	1788	4879
Total World	585	315	421	83	101	1505

SOURCE: i) BP Statistical Review of the World June,1990.
ii) World Development Report June, 1988 and International Financial Statistics, May, 1986 for population projections.
(Figures for India inserted.)

ESTIMATED PER CAPITA CONSUMPTION OF MAIN PETROLEUM PRODUCTS-SOME INTERNATIONAL COMPARISONS (1988)

Kg./per capita

Country/Area	Gasoline	Middle Distillates	Fuel	Others*	Total
1.	2.	3.	4.	5.	6.
U.S.A.	1365	927	299	646	3237
Canada	1054	934	294	602	2884
W.Europe	198	322	162	114	796
Japan	381	628	506	305	1820
Australasia	718	621	128	292	1759
India	4	36	11	12	63
Rest of Ncw	60	127	90	53	331
Total NCW	197	230	135	117	679

* = Includes refinery gas, LPG, solvents, petroleum Coke, bitumen and refinery fuel and loss.

SOURCES: 1. BP Statistical Review of World Energy June, 1989.
2. World Development Report, 1989 for population.

NOTE: Figures for India Inserted.

TRENDS IN WORLD PRIMARY ENERGY/CONSUMPTION

(Million/Tonnes Oil Equivalent)

YEAR	Oil	Natural Gas	Solid Fuels	Hydro-Electricity	Neclear Energy	Total
1.	2.	3.	4.	5.	6.	7.
1975	2720.9	1084.5	1715.3	353.4	86.1	5960.2
1976	2891.1	1145.7	1785.4	364.0	106.5	6292.7
1977	2984.2	1167.7	1830.0	373.3	132.1	6487.3
1978	3084.4	1213.3	1860.3	405.6	151.6	6715.2
1979	3141.7	1282.8	1967.9	424.4	155.9	6972.7
1980	3024.1	1296.4	1966.0	433.6	172.9	6893.0
1981	2918.3	1312.1	1959.1	443.2	203.2	6835.9
1982	2820.3	1308.9	2002.2	460.0	222.7	6814.1
1983	2797.3	1325.0	2039.2	482.0	248.0	6891.5
1984	2843.0	1426.5	2114.5	498.7	297.7	7180.4
1985	2826.5	1474.7	2209.6	510.2	350.9	7371.9
1986	2905.2	1487.4	2262.6	519.9	377.4	7552.5
1987	2948.4	1557.8	2341.9	534.3	406.3	7788.7
1988	3038.5	1641.0	2198.9	526.1	435.2	7854.0
1989	3097.8	1707.0	2231.8	526.2	450.6	8013.3

SOURCE: Various issues of B.P.Statistical Review of World Energy.
P = Provisional.

PRIMARY ENERGY/CONSUMPTION IN SELECTED COUNTIRES/AREAS OF THE WORLD - 1975, 1980, 1985, 1988 and 1989.

(Million Tonnes Oil eqvt.)

COUNTRY/AREA	1975	1980	1985	1988	1989 (P)	% Change over 1988
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA						
USA	1711.8	1842.0	1806.3	1935.8	1967.8	1.6
Canada	195.0	226.1	235.4	245.9	244.3	-0.6
Total North America	1906.8	2068.1	2029.1	2181.8	2212.1	1.4
Latin America	253.3	345.5	382.2	435.7	453.5	4.1
WESTERN EUROPE:						
Austria	23.4	25.2	25.2	26.6	26.6	0.2
Belgium & Luxembourg	46.7	48.0	48.1	51.8	51.0	-1.6
Denmark	18.2	18.2	18.4	18.0	16.4	-9.5
Finland	17.4	21.6	22.6	23.9	23.8	-0.6
France	171.1	186.5	188.6	197.1	201.4	2.2
Greece	17.0	16.7	19.0	21.8	22.1	1.6
Iceland	2.0	1.8	1.5	1.6	1.7	4.5
Republic of Ireland	7.1	8.2	8.5	8.8	9.7	2.6
Italy	132.9	144.1	139.6	151.9	155.0	2.1
Netherlands	71.3	70.7	69.7	74.4	74.3	+
Norway	28.8	29.7	32.0	33.1	32.8	-1.0
Portugal	8.8	11.5	10.7	12.0	13.2	9.6
Spain	61.9	76.9	77.9	83.1	86.6	4.3
Sweden	45.6	47.8	53.5	57.1	55.4	-2.8
Switzerland	23.5	26.4	28.6	28.7	27.0	-6.9
Turkey	19.7	25.8	31.1	49.7	51.5	3.5
United Kingdom	204.3	196.1	202.1	207.9	203.9	-1.9
West Germany	242.6	258.5	267.7	268.8	262.3	-2.4
Cyprus/Gibraltar/Malta	1.1	1.5	2.0	2.6	2.5	-4.9
Total Western Europe	1143.4	1215.2	1246.8	1316.3	1314.1	-3.2
Middel East	93.5	143.1	180.3	220.6	230.5	4.5
Africa	106.2	169.6	191.5	211.4	215.9	2.1
Japan	330.5	353.5	371.4	402.4	417.4	3.7
South East Asia	97.9	196.9	225.6	290.8	316.2	8.7
South Asia	105.7	150.3	198.5	205.4	215.6	4.9
Of which India*/R	86.6	106.6	153.9	197.0	208.0	5.6
Australasia	69.1	85.7	92.2	99.8	108.5	8.7
Total NCW	4109.3	4675.6	4917.6	5364.2	5483.8	2.2
Centrally-Planned Economics(CPEs):						
China	410.4	506.3	633.6	616.2	664.5	7.8
USSR	969.8	1149.8	1288.8	1389.9	389.4	+
Others	573.6	504.2	531.9	483.7	475.6	-1.7
Total CPEs	1853.8	2198.7	2500.1	2489.8	2529.5	1.8
Total World	5963.2	6835.9	7371.9	7854.0	8013.3	2.0

*/R = Estimated on the basis of Financial year data)despatches offtake for coal, oil products and Natural Gas) and using energy petroleum productivity and conversion factors as given in "BP Statistical Review of World Energy, June 1989. Figures for earlier years have been revised.

+ = Less than 0.05. P = Provisional.

SOURCE: BP Statistical Review of World Energy June 1990.

NOTE : Figures for India Inserted.

COMMERCIAL PRIMARY ENERGY PRODUCTION AND CONSUMPTION BY COUNTRY GROUPS - 1970-1995.

(Million b/d of oil Equivalent)

C O U N T R Y	1970		1980		1995	
	Produc-tion	Consump-tion	Produc-tion	Consump-tion	Produc-tion	Consump-tion
1.	2.	3.	4.	5.	6.	7.
I. Industrial Market Economics	43.2	63.1	49.9	74.2	69.1	92.0
Petroleum	12.6	32.1	14.1	36.8	13.5	34.1
Natural Gas	13.1	13.0	13.6	14.6	14.0	17.5
Solid Fuels	12.8	13.3	14.0	14.6	24.9	23.7
Primary Electricity	4.7	4.7	8.2	8.2	16.7	16.7
II. Non-Market Indus-trial Economics	28.0	27.2	45.0	43.2	63.2	62.5
Petroleum	8.1	7.8	14.8	13.9	15.7	16.3
Natural Gas	3.9	3.9	8.4	8.0	15.9	14.8
Solid Fuels	15.0	14.5	19.7	19.2	25.9	25.7
Primary Electricity	1.0	1.0	2.1	2.1	5.7	5.7
III. Capital Surplus Oil Exporters.	11.8	0.7	17.4	1.6	15.7	3.0
Petroleum	11.7	0.6	16.5	0.9	14.2	1.8
Natural Gas	0.1	0.1	0.9	0.7	1.5	1.2
Solid Fuels	-	-	-	-	-	-
Primary Electricity	-	-	-	-	-	-
IV. Developing Countries	18.0	9.0	22.5	15.9	42.5	33.1
i) Oil Exporters	14.6	2.9	16.9	5.1	29.0	11.1
Petroleum	13.6	2.0	15.0	3.6	21.9	5.9
Natural Gas	0.7	0.6	1.5	1.1	5.7	3.6
Solid Fuels	0.1	0.1	0.1	0.1	0.4	0.6
Primary Electricity	0.2	0.2	0.3	0.3	1.0	1.0
ii) Oil Importers	3.4	6.1	5.6	10.8	13.5	22.0
Petroleum	1.1	3.7	1.0	6.2	1.8	9.0
Natural Gas	0.2	0.2	0.4	0.4	1.5	1.6
Solid Fuels	1.5	1.6	2.6	2.6	5.2	6.4
Primary Electricity	0.6	0.6	1.6	1.6	5.0	5.0
TOTAL WORLD	101.0	100.0	134.8	134.9	190.5	190.6
Petroleum	47.1	46.2	61.4	61.4	67.1	67.1
Natural Gas	18.0	17.8	24.8	24.8	38.6	38.7
Solid Fuels	29.4	29.5	36.4	36.5	56.4	56.4
Primary Electricity	6.5	6.5	12.2	12.2	28.4	28.4
Bunkers & Others						

Average. Annual Growth rate of World Supplies (%)

	1970-80	1980-85
Total World	2.9	2.3
Petroleum	2.7	0.6
Natural Gas	3.3	3.0
Solid Fuels	2.2	3.0
Primary Electricity	6.5	5.8

SOURCE: World Bank Development Report-1983.

ECONOMIC INDICATORS OF OPEC NATIONS DURING 1988

Country	Population 1988 mid (Million)	GNP 1988 (Bn.$)	Per capita GNP 1988($)	Oil exports 1988 (Bn.$)	Total exports FOB (Bn.$)	Oil exports as % of total exports	Oil reserves 1.1.89 (Bn.bbls)	Gas reserves 1.1.89 (Bn.CM)	Producing oil wells (Dec.88)	Refining capacity 1.1.89	Exports of products (000 bbl/d)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Algeria	23.68	54.10	2285	4.99	7.40	67	9.2	3230	900	471	435.0
Ecuador	10.20	10.36	1016	0.98	2.19	45	1.6	113	935	133	25.9
Gabon	1.21	2.90	2400	0.78	1.17	67	0.7	16	289	21	3.0
Indonesia	174.60	68.67	393	5.19	19.39	27	9.0	2464	4273	739	202.3
Iran, IR	52.74	179.75	3408	8.17	9.08	90	92.9	14200	645	615	8.0
Iraq	17.21	52.00	3022	10.95	11.05	99	100.0	2690	435	366	75.0
Kuwait	1.96	25.79	13160	6.30	7.16	88	94.5	1378	490	670	635.0
Libya	4.23	18.40	4350	5.17	5.37	96	22.8	728	1000	342	90.0
Nigeria	123.98	30.05	242	6.13	6.53	94	16.0	2476	1820	266	21.0
Qatar	0.35	5.48	15646	1.71	1.87	91	4.5	4621	172	63	35.0
Saudi Arabia	14.02	77.60	5535	20.50	23.74	86	255.0	5195	590	1490	900.0
U.A.E.	1.50	23.29	15527	7.35	12.25	60	98.1	5664	1149	162	117.0
Venezuela	18.76	60.08	3202	8.16	9.63	85	58.5	3005	11911	1201	639.0
TOTAL	444.43	608.47	1369	86.36	116.83	74	762.8 (76.9%)	45780 (39.2%)	24609	6538 (8.9%)	3186.2 (27.7%)

* = Total includes figures for neutral zone Ras = al khaimah.
Figures in brackets are OPEC's share to total world.

PART—II
PLAN STATISTICS

1. SEVENTH PLAN

SEVENTH PLAN OUTLAYS (1985-90) AND ACTUAL EXPENDITURE FOR 1985-86, 1986-87 1987-88, 1988-89 AND REVISED ESTIMATES FOR 1989-90 FOR MINISTRY OF PETROLEUM AND NATURAL GAS

(Rs./Crores)

Undertaking	Seventh Plan Outlay 1985-90	Actual Expenditure 1985-86	1986-87	1987-88	1988-89	1989-90 (R.E.)	Total
1.	2.	3.	4.	5.	6.	7.	8.
A) Exploration & Production							
1. ONGC	8753	2123	2214	2041	2304	2744	11426
2. OIL	950	182	191	148	143	160	824
3. GAIL	950	253	593	421	315	296	1878
4. M/o Petroleum & Natural Gas	--	18	11	51	43	49	172
SUB TOTAL (A)	10653	2576	3009	2661	2805	3249	14300
B) Refining & Marketing							
1. IOC	958	119	112	131	112	181	655
2. BPCL	366	65	89	123	69	59	405
3. HPCL	299	84	82	66	95	78	405
4. MRL	33	13	16	22	10	20	81
5. CRL	28	12	11	6	9	20	58
6. BRPL	252	Neg.	Neg.	Neg.	-	2	2
7. Lubrizol India Ltd.	18	4	3	3	5	10	25
8. Engineers India Ltd.	21	5	4	8	4	1	22
9. M/o.Petroleum & N. Gas	--	--	--	--	--	--	--
SUB TOTAL (B)	1975	302	317	359	304	371	1653
C. Petrochemicals							
1. BRPL	105	42	31	21	13	12	119
2. BPCL	17	4	3	4	2	1	14
3. CRL	57	7	5	26	30	7	75
4. MRL	24	6	7	6	5	13	37
5. HPCL	15	--	--	Neg.	--	2	2
6. Others	25	--	--	--	--	--	--
SUB TOTAL (C)	243	59	46	57	50	35	247
D. Engineering							
1. IBP Co.Ltd. & Others**	50	6	10	13	25	39	93
GRAND TOTAL (A+B+C+D)	12921	2943	3382	3090	3184	3694	16293

**Excluding Bridge & Roof. Neg. = Negligible.

Domestic Crude Production Profile-Seventh Plan 1985-90

(in million tonnes)

	1985-86	1986-87	1987-88	1988-89	1989-90	Total 1985-90
A. ONGC						
1. ONLAND						
Cambay basin	4.10	4.50	4.90	5.50	6.00	25.00
Upper Assam & Nagaland	2.84	3.03	3.03	3.03	4.40	16.35
Sub-Total	6.94	7.53	7.93	8.53	10.40	41.33
2. OFFSHORE	20.17	20.52	20.52	20.35	20.75	102.31
Total ONGC(1+2)	27.11	28.05	28.45	28.88	31.15	143.64
B. OIL	3.03	3.03	3.03	3.03	3.38	15.50
GRAND TOTAL (A+B)	30.14 (30.17)	31.08 (30.48)	31.48 (30.36)	31.91 (32.04)	34.53 (34.09)	159.14 (157.14)

Source: The Seventh Five Year Plan 1985-90.
Figures in parenthesis relates to actual production.

Domestic Gas Production Profile-Seventh Plan 1985-90

(in Billion cubic metres)

	1985-86	1986-87	1987-88	1988-89	1989-90	Total 1985-90
A. ONGC						
1. ONLAND						
Cambay	1.06	1.09	1.11	1.11	1.11	5.48
Upper Assam	0.42	0.45	0.45	0.45	0.61	2.28
Assam Arakan Fold Belt (Training etc.)	0.03	0.05	0.08	0.10	0.11	0.37
Sub-Total(1)	1.51	1.59	1.64	1.66	1.83	8.23
2. OFFSHORE						
Bombay (associated)	4.20	4.60	4.74	4.09	4.05	21.68
Bombay (free)	-	-	7.30	7.30	7.67	22.27
Sub-Total(1)	4.20	4.60	12.04	11.39	11.72	43.95
TOTAL ONGC (1+2)	5.71	6.19	13.68	13.05	13.55	52.18
B. OIL	1.66	1.59	1.49	1.40	1.36	7.50
GRAND TOTAL (A+B)	7.37 (8.13)	7.78 (9.85)	15.17 (11.47)	14.45 (13.22)	14.91 (16.99)	59.68 (59.66)

Source: The Seventh Five Year Plan 1985-90.
Figures in parenthesis relates to actual production.

TARGETS FOR EXPLORATION ACTIVITY IN SEVENTH PLAN (1985-90)

	Unit	ONGC	OIL	TOTAL
1. Geological and Gravimagnetic Survey	(Party Years)	107	5	112
2. Seismic surveys:				
Onland	Party Years	284	38	322
Offshore	Thousand (Line metres)	140	17	157
3. Exploratory Drilling:				
Onland	Thousand metres	1703	346	2049
offshore	" "	710	62	772
TOTAL	" "	2413	408	2821

SOURCE: Seventh Five Year Plan Report.

SEVENTH PLAN TARGETS FOR OIL SECTOR (1985-90)

	Unit	1984-85 (Actual)	(Plan Target)	1989-90 (Actual)
	2.	3.	4.	5.
1. Production of Crude Oil:				
(i) On shore	Million Tonnes	8.85	13.78	12.37
(ii) Offshore	" "	20.14	20.75	21.72
TOTAL	" "	28.99	34.53	34.09
2. Production of Natural gas				
(i) Onshore	Billion Cu.Metres	2.83	3.19	3.90
(ii) Offshore	" " "	4.41	11.72	13.09
TOTAL	" " "	7.24	14.91	16.99
3. Refining				
(i) Refining Capacity (At yr.end)	Million Tonnes	45.55	51.75	51.85
(ii) Crude throughput ' '	" "	36.56	48.04-48.89	51.94
(iii) Production of Petroleum Products	" "	33.51	45.06-45.47	48.69
4. Net Imports:				
(a) Quantity				
Crude Oil	" "	7.16	13.51-14.36	19.49
Petroleum products	" "	5.16	6.94- 7.20	3.95
TOTAL		12.32	20.45-21.56	23.44
(b) Value of crude oil & Petroleum Products import	Rs./Crores	3527	5136	5622
5. Demand of petroleum products	Million Tonnes	38.80	52.00-52.67	53.09
6. LPG				
(i) Production	MMT	0.87	2.54	1.95
(ii) Number of Customers at year end	Lakhs	89.41	176.0	162.3
7. Compound Annual Growth Rates During 7th Plan Period	%age per annum			
(i) Production of Crude Oil			3.6	3.5
- Natural Gas	" " "		15.5	18.5
- POL Products	" " "		6.3-6.5	8.0
(ii) Consumption of all				
- POL Products	" " "		6.4	6.5
- Middle Distillates	" " "		6.8	6.4

SOURCE: Seventh Five Year Plan Report.

Demand For Petroleum Products 1984-85 To 1999-2000.

	1984-85	1989-90	1994-95	1999-2000
Demand for Petroleum Products (Million tonnes)	38.80	53.83	69.00	87.70
Annual Growth rate over the five years ending in the year (%)	5.40	6.70	5.50	4.90
Share of middle distillates (%)	57.81	60.20	63.19	66.19

Source: Seventh Five Year Plan.

Import Availability Ratios of Crude Oil & POL Products 1979-80 To 1989-90

(Million Tonnes)

	1979-80	1984-85	1985-86	1989-90
A. CRUDE OIL				
1. Production	11.77	28.99	30.17	34.08
2. Imports	16.12	7.16	14.62	19.49
3. Availability (net)	27.89	36.15	44.79	53.57
4. (2) as per cent of (3)	57.80	19.81	32.64	36.38
B. POL PRODUCTS				
1. Production	25.79	33.24	39.88	48.69
2. Imports	4.72	6.09	3.87	6.54
3. Availability (gross)	30.51	39.33	43.75	55.23
4. (2) as per cent of (3)	15.47	15.48	8.85	11.84

Source: Seventh Five Year Plan.

Value of Crude Oil & POL Products Imports During the Seventh Plan Period

(Rs./Crores)

Y E A R	Value* of Crude and POL Products Imports
1984-85	3527
1989-90	5622
Seventh Plan Total	22259

*Net of crude exports.
Source: Seventh Five Year Plan.

PART–III
FINANCIAL PERFORMANCE/ STRUCTURE AND QUICK REVIEW

PART–III
FINANCIAL PERFORMANCE/ STRUCTURE AND QUICK REVIEW

CAPITAL INVESTMENT:

The Capital investment defined as the sum total of paid-up capital and loans has registered an increase of 28.6% from Rs. 8277.30 Crores in 1987-88 to Rs.10645.87 crores in 1988-89. The increase in the capital investment in 1988-89 was mainly on account of increase in the paid up capital from Rs.1775.53 crores to Rs.1854.75 crores and loans from Rs. 6501.77 Crores, to Rs.8791.12 crores. The break-up of increase in the paid up capital and loans is as under :-

(A) PAID-UP CAPITAL

(Rs. Crores)

Name of the undertaking	1987-88	1988-89	% Increase
1. Gas Authority of India	840.32	845.32	0.6
2. Cochin Refineries Limited	10.00	68.48	584.8
3. Madras Refineries Limited	98.25	113.99	16.02

(B) LOANS

1. Oil & Natural Gas Commission	3460.68	4657.09	34.6
2. Oil India Limited	64.13	82.63	28.8
3. Indian Oil Crop. Ltd.	993.71	1969.17	98.2
4. Bharat Petroleum Corp.Ltd.	435.24	477.70	9.8
5. Gas Authority of India Ltd.	463.36	753.54	62.6
6. Indian Oil Blending Ltd.	1.57	6.76	330.6
7. Balmer Lawrie Ltd.	7.27	10.92	50.2
8. Biecco Lawrie Ltd.	33.25	41.36	28.2

The position of the foreign loans during three years 1986-87, 1987-88 & 1988-89 is given below:-

(Rs./Crores)

	1986-87	1987-88	1988-89
a) Foreign Loans	2494.02	3620.28	5890.88
b) Total Loans	4618.85	6501.77	8791.12
c) % of Foreign loans to Total loans	54.0	55.7	67.0

ONGC - had the highest foreign loans during three years.

The paid-up capital/loan ratio of all undertakings together increased from 0.20 in 1986-87 to 0.30 in 1987-88 and then dropped to 0.21 in 1988-89.

CAPITAL EMPLOYED:

Capital employed defined as the sum total of net fixed assets (net block) and working capital (excluding Capital Work in progress and Capital Goods) increased by 25.4% from Rs.13279.21 crores in 1987-88 to Rs.16653.79 crores in 1988-89. The increase in the capital employed occured mainly in respect of the following undertakings.

(A) NET FIXED ASSETS

(Rs./Crores)

Name of the Undertakings	1987-88	1988-89	% Increase
1. Oil and Natural Gas Commission	5579.87	6642.48	19.0
2. Oil India Limited	148.44	172.70	16.3
3. Gas Authority of India Ltd.	915.89	935.75	2.2
4. Indian Oil Corpn. Ltd.	756.76	825.61	9.1
5. Bharat Petroleum Corpn.Ltd.	378.46	516.23	36.4
6. Hindustan Petroleum Corpn.Ltd.	479.11	542.87	13.3
7. Madras Refineries Ltd.	172.03	186.00	8.1
8. IBP Co. Ltd.	19.72	26.40	33.8
9. Lubrizol India Ltd.	14.96	17.19	14.9
10. Indian Oil Blending Ltd.	2.76	3.79	37.3
11. B.R.P.L.	151.41	264.57	74.7
12. Engineers India Ltd.	23.65	41.35	74.8
13. Balmer Lawrie Ltd.	12.58	16.40	30.4
14. Biecco Lawrie Ltd.	0.60	0.77	28.3

(B) WORKING CAPITAL

1. Oil and Natural Gas Commission	1672.12	2047.55	22.5
2. Oil India Ltd.	191.61	245.88	28.3
3. Indian Oil Corpn.Ltd.	1791.49	3150.03	75.8
4. Bharat Petroleum Corpn. Ltd.	171.02	228.07	33.4
5. Madras Refineries Ltd.	125.59	138.14	10.0
6. Lubrizol India Ltd.	19.94	32.29	61.9
7. Indian Oil Blending Ltd.	2.00	3.27	63.5
8. B.R.P.L.	62.59	99.43	58.8
9. Engineers India Ltd.	40.66	40.85	0.5
10.Balmer Lawrie Ltd.	30.72	38.10	24.0

SALES TURNOVER :

The sales turnover of all the Undertakings clubbed together increased by 8.9% from Rs.34207.92 crores in 1987-88 to Rs.37253.21 crores in 1988-89. The Company-wise share of sales-turnover showing the amount is as under :-

(Rs./Crores)

			% Share
1.	ONGC	6843.16	18.3%
2.	IOC	15150.74	40.7%
3.	BPCL	4348.68	11.7%
4.	HPCL	5866.78	15.7%
5.	Others	5043.85	13.6%
	Total	37253.21	100.0%

PROFITABILITY :

The adjusted gross profit which stood at Rs.3610.38 crores during 1987-88 increased to Rs.3987.97 crores in 1988-89. The adjusted gross profit expressed as a percentage of sales turnover went up from 10.5% in 1987-88 to 10.7% in 1988-89. The adjusted net profits have also gone up from Rs.2294.14 crores in 1987-88 to Rs.2536,81 crores in 1988-89. The adjusted net profit expressed as a percentage of paid-up Capital went up from 116.1% in 1987-88 to 136. 8% in 1988-89 while that of net profits to net worth went down from 19.7% to 17.9%. The return on capital employed, declined from 27.1% to 23.9%.

DIVIDENDS :

There has been an increase in the quantum of dividends paid by the Public Sector Undertakings over the three years. The total dividend increased from Rs.97.31 crores in 1987-88 to Rs.126.94 crores in 1988-89. The highest amount of dividend was paid by Oil & Natural Gas Commission which paid Rs.51.43 crores in 1988-89. The Indian Oil Corporation Limited paid Rs.24.65 crores in 1988-89 against Rs.22.19 crores in 1987-88. Biecco Lawrie Ltd., ONGC's Videsh Ltd., GAIL did not declare any dividend during the year under review.

CORPORATE TAX :

The contribution made to the National Exchequer by the Public Sector Undertakings by way of taxes was Rs. 764.10 Crores in 1988-89 as against Rs.797.14 crores in 1987-88. The decline in payment of Corporate tax is due to reduction in taxable income for the year.

(A) EXPLORATION & PRODUCTION :

This category includes the following four enterprises and the data in respect of each undertaking is given in table Nos. 5 to 8, while their consolidated position is provided in Table No. 4.

1. Oil & Natural Gas Commission (ONGC)
2. ONGC's Videsh Ltd. (formerly Hydro Carbons India Limited (HCIL)
3. Oil India Limited. (OIL)
4. Gas Authority of India Ltd. (GAIL)

Summary position of these undertakings for three years is as under :

Rs./Crores

	1986-87	1987-88	1988-89
1. Paid up Capital	395.85	1236.17	1241.17
2. Loans	3023.64	3988.17	5493.26
3. Net Worth	6369.40	8642.07	10230.96
4. Capital Employed	6936.28	8560.72	10071.58
4.1.Net Fixed Assets	5166.31	6644.22	7750.97
4.2.Working Capital	1769.97	1916.50	2320.61
5. Sales turnover	5625.84	6644.50	7687.22
6. Adjusted Gross Profit	2625.54	2446.81	2513.18
7. Adjusted Net Profit	1732.26	1616.20	1601.72
8. Dividends	40.20	44.48	55.63
9. Corporate Tax	657.49	563.99	510.49

The sailent points of the analysis are given as under:

(1) CAPITAL INVESTMENT

There has been an increase of 28.9% in the Capital investment from Rs.5224.34 crores in 1987-88 to Rs.6734.43 crores in 1988-89. The increase in the capital investment was on account of increases in the paid-up capital and loans of the undertakings noted below.

(Rs./Crores)

	1987-88	1988-89	% Increase
1. Oil & Natural GAs Commission	3803.53	4999.94	31.5
2. Oil India Limited	92.13	110.63	20.0
3. Gas Authority of India ltd.	1303.68	1598.86	22.6

(2) CAPITAL EMPLOYED

The capital employed registered an increase of 17.6% from Rs. 8560.72 Crores in 1987-88 to Rs. 10071.50 Crores in 1988-89. The increase in capital employed comprised of the increases in the Net Fixed Assets and Working Capital as under:-

(Rs./Crores)

A. Net Fixed Assets

	1987-88	1988-89	% Increase
1. Oil & Natural Gas Commission	5579.87	6642.48	19.0
2. Oil India Limited	148.44	172.70	16.3
3. Gas Authority of India Ltd.	915.89	935.75	2.2

B . Working Capital

1. Oil & Natural Gas Commission	1672.12	2047.55	22.4
2. Oil India Limited	191.61	245.88	28.3

(3) SALES TURNOVER

The sales trunover under this category went up from Rs.6644.50 crores in 1987-88 to Rs.7687.22 crores in 1988-89 showing an increase of 15.7%. The sales of Oil & Natural Gas Commission went up from Rs.6096.84 crores in 1987-88 to Rs.6843.16 crores in 1988-89 and that of Oil India Limited increased from Rs.507.40 crores to Rs.516.67 crores in the same period. There has also been an increase in the Sales Turnover of Gas Authority of India, from Rs.40.26 crores to Rs.327.39 crores in the same period.

(4) PROFITABILITY

The adjusted gross profit increased by 2.7% from Rs.2446.81 Crores in 1987-88 to Rs.2513.18 crores in 1988-89. The gross profits expressed as a %age of sales turnover decreased from 36.8% in 1987-88 to 29.5% in 1988-89. The ratio of gross profit to Capital employed declined from 28.5% to 24.9%. The ratios of net profit to paid up capital and net worth which were 130.7% and 18.7% in 1987-88 went down to 129.8% and 15.7% in 1988-89 respectively.

(5) DIVIDEND

The dividend declared by ONGC and OIL has been going up continuously. During 1988-89 the dividend was Rs.55.63 crores as against Rs.44.48 crores in 1987-88.

(6) CORPORATE TAX

The contribution made by ONGC & OIL by way of taxes to the National exchequer has decreased from Rs.563.99 crores in 1987-88 to Rs.510.49 crores in 1988-89 due to reduction in Taxable Income of these companies.

(B) REFINING AND MARKETING :

Financial structure and performance of the individual undertakings have been provided in the table Nos. 10 to 17, while the consolidated position of refining and marketing has been given in the table No. 9. Summary position of the undertakings for three years is as under :-

(Rs./Crores)

	1986-87	1987-88	1988-89
1. Paid up Capital	329.75	332.75	406.97
2. Loans	1415.86	2362.20	3157.45
3. Net Worth	2051.68	2697.50	3592.59
4. Capital Employed	3495.88	4394.21	6079.09
4.1.Net Fixed Assets	1825.37	1959.93	2273.90
4.2.Working Capital	1670.51	2434.28	3805.19
5.1.Sales turnover	21296.47	26999.62	28952.28
5.2.Other Income	100.10	191.76	290.28
Total	21396.57	27191.38	29242.56
6. Adjusted Gross Profit	1057.63	1102.19	1412.56
7. Adjusted Net Profit	584.02	646.99	910.51
8. Dividends	47.50	51.79	64.19
9. Corporate Tax	262.41	220.33	239.49

An analysis of the salient features is given below :

(1) CAPITAL INVESTMENT

During the year the capital investment increased by 32.3% from Rs.2694.95 crores in 1987-88 to Rs.3564.42 crores in 1988-89. The increase in 1988-89 comprised of the increases in paid-up capital and loans in respect of the following undertakings.

(A) PAID-UP CAPITAL

(Rs./Crores)

	Name of the Undertaking	1987-88	1988-89	% Increase
1.	Cochin Refineries Limited	10.00	68.48	548.8
2.	Madras Refineries Ltd.	98.25	113.99	16.0
	(B) LOANS			
1.	Indian Oil Corp.Ltd.	993.71	1969.17	98.2
2.	Bharat Petroleum Corp.Ltd.	435.24	477.70	9.8
3.	Indian Oil Blending Ltd.	1.57	6.76	330.6

With the increase in the loans in 1988-89 the paid-up capital/loans ratio has gone down from 0.14 in 1987-88 to 0.12 in 1988-89.

CAPITAL EMPLOYED

The Capital employed in the Refining and Marketing category increased by 38.3% from Rs.4394.21 crores in 1987-88 to Rs. 6079.09 crores in 1988-89. This was due to increase in net fixed Assets and working capital as under :

(Rs./Crores)

SNo.	Name of the Undertaking	1987-88	1988-89	% Increase
1.	Indian Oil Corpn. Ltd.	2548.25	4002.64	57.0
2.	Bharat Petroleum Corpn. Ltd.	549.48	744.30	35.4
3.	Madras Refineries Ltd.	297.62	324.14	8.9
4.	IBP Co. Ltd.	28.59	31.88	11.5
5.	Lubrizol India Ltd.	34.90	49.48	41.7
6.	Indian Oil Blending Ltd.	6.76	7.06	4.4

(3) SALES TURNOVER.

The sales turnover of the Companies under this category has increased by 7.4% from Rs. 26949.62 Crores in 1987-88 to Rs. 28952.28 Crores in 1988-89. The details of sales turnover in respect of major companies under this category are as under :

(Rs./Crores)

		1987-88	1988-89
1.	IOC	14271.08	15150.74
2.	BPCL	4050.02	4348.68
3.	HPCL	5450.70	5866.78
4.	CRL	1032.23	1164.16
5.	MRL	1198.80	1330.28

(4) PROFITABILITY.

The increased sales turnover has resulted in increased gross profit. The %age of gross profit to sales turnover was 4.9% during 1988-89 as against 4.0% in 1987-88.

The adjusted gross profits and Net Profits increased from Rs. 1102.19 crores & 646.99 crores in 1987-88 to Rs.1412.56 crores and Rs.910.51 crores respectively in 1988-89. The return on capital Employed which was 25.0% dropped to 23.2%. The ratio of net profit to paid-up capital and Net worth increased from 194.2% & 24.1% in 1987-88 to 233.8% & 25.3% in 1988-89.

(5) DIVIDEND.

During 1988-89, the companies under Refining and marketing paid out Rs. 64.19 crores as dividend as against Rs.51.79 crores in 1987-88. The amount paid in 1986-87 was Rs.47.50 crores. IOC paid out the highest amount of dividend amounting to Rs.24.65 crores which was 20% of the paid-up capital.

(6) CORPORATE TAX.

The taxes paid by this group of companies was Rs.239.49 crores in 1988-89 against Rs.220.33 crores in 1987-88. The decline in payment of corporate Tax in 1988-89 is due to taxable income going down. The amount paid in 1986-87 was Rs.262.41 crores.

(C) PETROCHEMICAL

There is only one undertaking in this category viz., Bongaigoan Refinery & Petrochemicals Ltd. The financial structure and performance of BRPL for three years has been given in table no. 18. The position is as under :

(Rs./Crores)

	1986-87	1987-88	1988-89
1. Paid-up Capital	199.82	199.82	199.82
2. Loans	141.97	105.13	83.13
3. Net Worth	234.42	258.72	275.63
4. Capital Employed	250.84	214.00	364.00
4.1.Net Fixed Assets	168.70	151.41	264.57
4.2.Working Capital	82.14	62.59	99.43
5. Sales turnover	267.31	342.51	338.56
6. Adjusted gross Profit	36.64	35.11	38.48
7. Adjusted net profit	23.27	22.11	22.02
8. Dividend paid	NIL	NIL	NIL
9. Corporate Tax	NIL	4.34	4.30

As analysis of the salient features is as under :

(1) CAPITAL INVESTMENT:

The capital investment decreased by 07.3% from Rs.304.95 crores in 1987-88 to Rs.282.95 crores in 1988-89. The decrease is due to reduction in loans from Rs.105.13 crores in 1987-88 to Rs. 83.13 crores. With the decrease in loans, the paid-up capital/loans ratio increased from 1.90 in 1987-88 to 2.40 in 1988-89.

(2) CAPITAL EMPLOYED:

The capital employed increased by 70% from Rs.214.00 crores in 1987-88 to Rs.364.00 crores in 1988-89. The increase in Capital employed is due to increase in the net fixed assets and working capital in 1988-89 of the undertaking as compared with those in 1987-88.

(3) SALES TURNOVER:

The Sales Turnover decreased by 1.2% from Rs.342.51 Crores in 1987-88 to Rs.338.56 Crores in 1988-89.

(4) PROFITABILITY:

The % age of gross profits to sales turnover stood at 11.3% in 1988-89 as against 10.3% in 1987-88. The return on capital employed decreased from 16.4% to 10.5% in the same period. The ratio of Net profit to paid-up Capital was the same in 1988-89, while there was an increase in that of net profit to Net worth.

CORPORATE TAX:

The Company paid Rs.4.30 crores to the national exchequer for the 2nd time since its inception as Corporate Tax in 1988-89 as against Rs. 4.34 crores paid in 1987-88.

(D) ENGINEERING UNITS

There are at present 3 undertakings under this category, which are :

i. Engineers India Ltd. (EIL)

ii. Balmer Lawrie Ltd. (BLL)

iii. Biecco Lawrie Ltd. (BLL)

The consolidated position of the three companies has been given in Tabel No.19 while those of the individual companiess have been provided in table Nos.20 to 22.

Summary of the results for these companies is as under :

(Rs./Crores)

	1986-87	1987-88	1988-89
1. Paid-up Capital	6.79	6.79	6.79
2. Loans	37.38	46.27	57.28
3. Net Worth	56.66	64.08	65.30
4. Capital Employed	102.35	110.28	139.12
4.1 Net Fixed Assets	35.42	36.83	58.52
4.2 Working Capital	66.93	73.45	80.60
5. Sales turnover	190.99	221.29	275.15
6. Adjusted gross Profit	26.74	26.27	23.75
7. Adjusted net Profit	8.90	8.84	2.58
8. Dividend	1.00	1.04	1.13
9. Corporate Tax	11.34	8.48	9.82

An analysis of the salient features are as under :

(1) CAPITAL INVESTMENT

The Capital Investment under this category increased by 20.8% from Rs.53.06 Crores in 1987-88 to Rs.64.07 Crores in 1988-89. The corresponding increase in the preceding year was 20.1%. The increase in the capital Investment was due to increase in the loans of the undernoted companies as under:

LOANS

(Rs. in Crores)

SNo.	Name of the Company	1987-88	1988-89	% Increase
1.	Balmer Lawrie Co.Ltd.	7.27	10.92	50.2
2.	Biecco Lawrie Ltd.	33.25	41.36	24.3
	Total	40.52	52.28	29.0

With the increase in loans the paid-up capital/loans ratio came down from 0.14 in 1987-88 to 0.11 in 1988-89.

(2) CAPITAL EMPLOYED

The capital employed by the engineering units has increased by 26.2% from Rs. 110.28 Crores in 1987-88 to Rs.139.12 Crores in 1988-89. The corresponding increase in the preceding year was 7.7% . The net fixed assets and working capital of the companies under this category are as under :-

(A) NET FIXED ASSETS

	1987-88	1988-89	(Rs./Crores) % + Increase - decrease
1. Engineers India Ltd.	23.65	41.35	74.8
2. Balmer Lawrie Ltd.	12.58	16.40	30.3
3. Biecco Lawrie Ltd.	0.60	0.77	28.3
TOTAL:	36.83	58.52	58.9

(B) WORKING CAPITAL

1. Engineers India Ltd.	40.66	40.85	0.5
2. Balmer Lawrie Ltd.	30.72	38.10	24.02
3. Biecco Lawrie Ltd.	2.07	1.65	(-) 20.3
TOTAL:	73.45	80.60	9.7

(3) SALES TURNOVER

The Sales turnover of the undertakings in this category increased by 24.3% from Rs.221.29 crores in 1987-88 to Rs.275.15 crores in 1988-89. The Corresponding increase in the preceding year was 15.9%. The ratio of gross profit to sales turnover declined from 11.8% in 1987-88 to 8.6% in 1988-89.

(4) PROFITABILITY

The adjusted gross profits have come down from Rs.26.27 Crores in 1987-88 to Rs. 23.75 Crores in 1988-89. Similarly there has been a small fall in the adjusted net profits in 1988-89. The ratio of net profit to paid up capital and net worth came down from 130.1% to 13.7% in 1987-88 to 38.0% & 4.0% in 1988-89 respectively.

(5) DIVIDEND

There is an increase of Rs.9 lakhs from Rs.104 lakhs in 1987-88 to Rs.113 lakhs in 1988-89 in the payment of dividend to the Government by the Companies under this category. The amount paid in 1986-87 was Rs.100 lakhs.

(6) CORPORATE TAX

The contribution made by the companies to National Exchequer by way of taxes was Rs.9.82 crores in 1988-89 as against Rs.8.48 crores in 1987-88. The amount paid in 1986-87 was Rs.11.34 crores.

QUICK REVIEW OF FINANCIAL STRUCTURE 1989-90

In 1989-90, there were 16 enterprises (including two subsidiaries viz., ONGC's Videsh Ltd., & Indian Oil Blending Ltd.) under the department of Petroleum & Natural Gas, Four under "Exploration and production" Eight under Refining & Marketing One under petrochemicals and Three under Engineering Services. According to provisional figures available in E & S division, the 16 enterprises together employed a total capital of Rs.21972.29 crores and had a paid-up capital of Rs.1890.66 crores as per enterprisewise details in Annexure-I. During 1989-90 these enterprises achieved an annual Sales turnover of Rs.42417.17 crores and earned a gross profit of Rs.4042.99 crores the corresponding figures for the year 1988-89 being Rs.37253.21 crores and Rs.3741 crores. Thus while the sales turnover increased by 13.9% the gross profit went up by 8.0%. The net profit after interest and taxes amounted to Rs.2689.37 crores during 1989-90 as against Rs.2570.72 crores in 1988-89. The ratio of net profit to paid-up capital and net worth worked out to 142.1% & 16.1% in 1989-90 as against 138.6% and 18.1% in 1988-89 respectively.

The over-all financial position/results for the year 1989-90 under each of the above mentioned categories are summariesed as under :

(Rs./Crores)

	Exploration and production	Refining and Marketing	Petro-Chemicals.	Engg. Units.	Total
1. Paid-up Capital	1241.17	438.01	199.82	11.66	1890.66
2. Loans	6854.82	6388.43	44.63	65.43	13353.31
3. Net Worth	11867.69	4484.48	292.37	97.32	16741.66
4. Capital Employed	11371.26	10132.19	319.11	149.73	21972.29
5. Sales turnover	9333.01	32381.50	400.00	302.66	42417.17
6. Gross profit before Interest & Tax	2333.94	1649.44	35.54	24.07	4042.99
7. Net profit after Interest & Tax	1694.37	966.58	21.61	6.81	2689.37
8. Corporate Tax	483.79	250.31	4.18	2.45	740.73
9. Dividend	55.63	84.08	6.00	1.26	146.97
% age of					
1. Net profit to paid-up Capital	136.5	220.7	10.8	58.4	142.1
2. Net profit to net worth	14.3	21.6	7.4	7.0	16.1
3. Gross Profit to Capital Employed	20.5	16.3	11.1	16.1	18.4

It would be seen from Annexure-I that with the exception of one company viz. Biecco Lawrie Ltd., all the companies have made profits. ONGC has earned the highest gross profit of Rs.2154.80 crores with IOC standing as second with 970.47 crores. Likewise ONGC has earned the highest net profit of Rs.1625.12 crores. with IOC standing next with a net profit of Rs.526.61 crores. The third company to earn the highest net profit was HPCL with a profit of Rs.200 crores.

FINANCIAL STRUCTURE OF THE PUBLIC/JOINT SECTOR UNDERTAKINGS UNDER THE PURVIEW OF MINISTRY OF PETROLEUM & NATURAL GAS DURING THE YEAR 1989-90. PROVISIONAL

Annexure-I Rs./Lakhs.

Name of the Undertaking	Paid-up Capital	Loans	Net Worth	Capital Employed	Sales/ Operating Income	Gross Profit before Interest & Tax	Net Profit after Tax & Interest	Corp-orate Tax	Divi-dend	% age of Net Profit to paid up-cap.	Net Profit to net Worth	Gross Profit to Capital Employed
1	2	3	4	5	6	7	8	9	10	11	12	13
A.Exploration & Production	124117	685482	1186769	1137126	933301	233394	169437	48379	5563	136.5	14.3	20.5
1.ONGC	34285	577970	1047986	956266	807809	215480	162512	44702	5143	474.0	15.5	22.5
2.ONGC's Videsh Ltd.	2500	NIL	5759	2789	496	417	250	167	NIL	10.0	4.3	15.0
3.OIL	2800	22046	63122	44311	64343	14105	8698	3510	420	310.6	13.8	31.8
4.GAIL	84532	85466	69902	133760	60653	3392	-2023	NIL	NIL	Neg.	Neg.	Neg.
B.Refining & Marketing	43801	638843	448448	1013219	3238150	164944	96658	25031	8408	220.7	21.6	16.3
5.IOC	12327	509794	271983	747061	1725776	97074	52061	12425	2465	422.3	19.1	13.0
6.BPCL	5000	50983	53782	91107	469291	17165	11619	2246	1000	232.4	21.6	18.8
7.HPCL	6384	41100	67876	97527	650248	29300	20000	4800	894	313.3	29.5	30.0
8.CRL	6891	11997	20318	32486	133707	8816	6604	1411	1392	95.8	32.5	27.1
9.MRL	11413	18913	23396	33613	133564	10251	5023	3469	2396	44.0	21.5	30.5
10.IBO CO.LTD	786	3250	5989	4977	105904	795	498	187	113	63.4	8.3	16.0
11.LIL	960	1174	4466	4448	18684	1416	734	470	144	76.5	16.4	31.8
12.IOBL	40	1632	638	2000	976	154	119	23	4	297.5	18.6	7.7
C.Petro-chemicals	19982	4463	29237	31911	40000	3554	2161	418	600	10.8	7.4	11.1
13.BRPL	19982	4463	29237	31911	40000	3554	2161	418	600	10.8	7.4	11.1
D.Engineering services	1166	6543	9732	14973	30266	2407	681	245	126	58.4	7.0	16.1
14.EIL	100	425	8216	6691	6200	1254	518	NIL	25	518.0	6.3	18.7
15.Balmer Lawrie Ltd.	869	1406	5696	7964	23192	1439	480	245	101	55.2	8.4	18.1
16.Biecco Lawrie Ltd.	197	4712	-4180	318	874	-286	-317	--	--	Neg.	Neg.	Neg.
GRAND TOTAL (A+B+C+D)	189066	1335331	1674186	2197229	4241717	404299	268937	74073	14697	142.1	16.1	18.4

Note: Paid-up capital of IBP Co. Ltd. includes Rs. 50 lakhs as preference share capital.

TABLE NO.1

CONSOLIDATED FINANCIAL STRUCTURE. 1988-89
ALL CATEGORIES

(Rs./Lakhs)

	I T E M	Exploration & Production.	Refining & Marketing.	Petro-Chemicals.	Engineering & Other Servicing Units.	Total
	(1)	(2)	(3)	(4)	(5)	(6)
1.	Authorised Capital	108000	52540	20000	1250	181790
2.	i) Paid-up Capital	124117	40647	19982	679	185425
	ii) Preference Capital	--	50	--	--	50
	iii) Reserve & Surpluses	935091	319583	7694	9978	1272346
3.	i) Total Loans	549326	315745	8313	5728	879112
	ii) Of which Foreign	395379	193341	368	--	589088
4.	Cash Credits/Advances from Banks/Others	--	27946	2343	2288	32577
5.	Net Worth	1023096	359259	27563	6530	1416448
6.	i) Gross Block	1423544	517696	38822	8371	1988433
	ii) Less Depreciation	648447	290306	12365	2519	953637
	iii) Net Fixed Assets	775097	227390	26457	5852	1034796
	iv) Working Capital	232061	380519	9943	8060	630583
	v) Capital Empl(iii+iv)	1007158	607909	36400	13912	1665379
7.	i) Sales	768722	2895228	33856	27515	3725321
	ii) Other Income	15215	29028	135	474	44852
	Total	783937	2924256	33991	27989	3770173
8.	i) Total Emoluments (incl. perks)	30306	31699	815	4795	67615
	ii) Of which Bonus	2049	2744	21	114	4928
	iii) Average Emolument per person p.a.	0.56	0.53	0.46	0.54	0.54
9.	Inventories	126430	318108	11499	3705	459742
10.	Gross Profit					
	a) Gross Profit before Interest & Tax (Actual)	226926	140982	3839	2353	374100
	b) Adjusted Gross Profit	251318	141256	3848	2375	398797
11.	Net Profit					
	a) Net Profit after Tax & Interest (Actual)	163867	90777	2192	236	257072
	b) Adjusted Net Profit	160170	91051	2202	258	253681
12.	Dividends Declared	5563	6412	599	113	12687
13.	Corporate Tax	51049	23949	430	982	76410
% age of:-						
a)	N.P./Adjusted NP to Paid -up capital	132.0/129.8	223.0/223.7	10.9	34.8/38.0	138.6/136.8
b)	N.P./Adjusted N.P.to Net Worth	16.0/15.6	25.2	8.0	3.6/4.0	18.1/17.9
c)	GP/Adjusted GP to Capital Emp.	23.5/24.9	27.2	10.8	16.9	22.4/23.9
d)	Sales to Capital Emp.	76.3	476.3	93.0	97.8	223.7
e)	G.P/Adjusted GP to Sale	29.5	4.9	11.3	8.6	10.0/10.7
f)	Paid-up Capital/ Loans Ratio	0.23	0.12	2.6	0.11	0.21

Source: 1. Annual Reports of the Companies & data supplied by them.
2. There is no authorised Capital in respect of ONGC in exploration and production category.
3. Adjusted/Gross Profits & Net Profits are as defined in the glossary of terms.

TABLE NO.2

CONSOLIDATED FINANCIAL STRUCTURE. 1987-88

ALL CATEGORIES (Rs./Lakhs)

I T E M	Exploration & Production.	Refining & Marketing.	Petro-Chemicals.	Engineering & Other Servicing Units.	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Authorised-Capital	108000	46020	20000	950	174940
2. i) Paid-up Capital	123617	33325	19982	679	177503
ii) Preference Capital	--	50	--	--	50
iii) Reserve & Surpluses	754585	235699	6102	8999	1005385
3. i) Total Loans	398817	236220	10513	4627	650177
ii) Of which Foreign	265288	96409	331	--	362028
4. Cash Credits/Advances from Banks/Others	800	28315	28	1841	30984
5. Net Worth	864207	267950	25872	6408	1164437
6. i) Gross Block	1187181	445386	24367	5881	1662815
ii) Less Depreciation	522759	249393	9226	2198	783576
iii) Net Fixed Assets	664422	195993	15141	3683	879239
iv) Working Capital	191650	243428	6259	7345	448682
v) Capital Empl (iii+iv)	856072	439421	21400	11028	1327921
7. i) Sales	664450	2699962	34251	22129	3420792
ii) Other Income	2484	19176	222	579	22461
Total	666934	2719138	34473	22708	3443253
8. i) Total Emoluments (incl. perks)	26151	26255	650	3450	56506
ii) Of which Bonus	1943	2577	46	132	4698
iii) Average Emoluments per person p.a.	0.52	0.47	0.40	0.40	0.47
9. Inventories	122286	302998	7584	2468	435336
10. Gross Profit					
a) Gross Profit before Int.& Tax (actual)	233377	110129	3516	2581	349603
b) Adjusted Gross Profit	244681	110219	3511	2627	361038
11. Net Profit					
a) Net Profit after Tax & Interest (actual)	150317	64619	2216	837	217989
b) Adjusted Net Profit	161620	64699	2211	884	229414
12. Dividends Declared	4448	5179	--	104	9731
13. Corporate Tax.	56399	22033	434	848	79714
% age of:-					
a) N.P./Adjusted NP to paid up Capital	121.6/ 130.7	194.2	11.0	123.2/ 130.1	110.3/ 116.1
b) N.P./Adjusted N.P. to Net worth	17.4/ 18.7	24.1	8.6	13.0/ 13.7	18.7/ 19.1
c) GP/Adjusted G.P.to Capial Emp.	27.2/ 28.6	25.0	16.4	23.4/ 23.8	26.3/ 27.1
d) Sales to Capital Emp.	77.6	614.4	160.0	200.6	257.6
e) GP/Adjusted GP to Sales	35.1/36.8	4.0	10.3	11.6/11.8	10.2/10.5
f) Paid -up Capital/Loans Ratio	0.30	0.14	1.90	0.14	0.30

Source: 1. Annual Reports of the Companies & data supplied by them.

2. There is no authorised Capital in respect of ONGC in exploration and production category.

3. Adjusted/Gross Profits & Net Profits are as defined in the glossary of terms.

TABLE NO.3

CONSOLIDATED FINANCIAL STRUCTURE. 1986-87
ALL CATEGORIES

(Rs./lakhs)

I T E M	Exploration & Production.	Refining & Marketing.	Petro-Chemicals.	Engineering & Other Servicing Units.	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Authorised Capital	8000	46020	20000	950	74970
2. i) Paid-up Capital	39585	32925	19982	679	93171
ii) Preference Capital	--	50	--	--	50
iii) Reserve & Surplus	601410	173228	3886	7555	786079
3. i) Total Loans	302364	141586	14197	3738	461885
ii) Of which Foreign	210513	38498	391	NIL	249402
4. Cash Credits/Advances from Banks/Others	368	65912	1267	1796	69343
5. Net Worth	636940	205168	23442	5666	871216
6. i) Gross Block	909503	396069	24051	5403	1335026
ii) Less Depreciation	392872	213532	7181	1861	615446
iii) Net Fixed Assets	516631	182537	16870	3542	719580
iv) Working Capital	176997	167051	8214	6693	358955
v) Capital Empl(iii+iv)	693628	349588	25084	10235	1078535
7. i) Sales	562584	2129647	26731	19099	2738061
ii) Other Income	45769	10010	127	666	56572
Total	608353	2139657	26858	19765	2794633
8. i) Total Emoluments (incl. perks)	23317	24000	511	2994	50822
ii) Of which Bonus	1972	2610	17	131	4730
iii) Average Emoluments per person p.a.	0.48	0.45	0.34	0.36	0.43
9. Inventories	118359	289849	8649	2066	418923
10. Gross Profit					
a) Gross Profit before Inst.& Tax (actual)	243079	105456	3662	2666	354863
b) Adjusted Gross Profit	262554	105763	3664	2674	374655
11. Net Profit					
a) Net profit after Tax and Int.(actual)	153751	58103	2325	883	215062
b) Adjusted Gr.Profit	173226	58402	2327	890	234845
12. Dividends Declared	4020	4750	--	100	8870
13. Corporate Tax.	65749	26241	--	1134	93124
% age of:-					
a) N.P./Adjusted NP to Paid-up Capital	388.4/ 437.6	176.2/ 177.1	11.6	130.3/ 131.0	230.7/ 251.9
b) N.P./Adjusted N.P. to Net Worth	24.1/ 27.1	28.4	9.9	15.6	24.8/ 26.9
c) GP/Adjusted G.P. to Capital Emp.	35.0/ 37.8	30.1	14.5	26.0	32.9/ 34.7
d) Sales to Capital Emp.	81.1	609.1	106.6	186.6	253.8
e) G.P/Adjusted GPtoSales	43.2/46.7	5.0	13.6	14.0	12.9/13.6
f) Paid-up Capital/Loan Ratio.	0.13	0.23	1.41	0.18	0.20

Source: 1. Annual Reports of the undertakings & data supplied by them.
2. There is no authorised Capital in respect of ONGC in exploration and production category.
3. Adjusted/Gross Profits & Net Profits are as defined in the glossary of terms.

TABLE NO.4

CONSOLIDATED FINANCIAL STRUCTURE OF EXPLORATION & PRODUCTION

(Rs./Lakhs)

ITEM	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	8000	108000	108000
2. i) Paid-up Capital	39585	123617	124117
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluses	601410	754585	935091
3. i) Total Loans	302364	398817	549326
ii) Of which Foreign	210513	265288	395379
4. Cash Credits/Advances from Banks/Others	368	800	NIL
5. Net Worth	636940	864207	1023096
6. i) Gross Block	909503	1187181	1423544
ii) Less Depreciation	392872	522759	648447
iii) Net Fixed Assets	516631	664422	775097
iv) Working Capital	176997	191650	232061
v) Capital Empl.(iii+iv)	693628	856072	1007158
7. i) Sales	562584	664450	768722
ii) Other Income	45769	2484	15215
Total	608353	666934	783937
8. i) Total Emoluments (incl. perks)	23317	28151	30306
ii) Of which Bonus	1972	1943	2049
iii) Average Emoluments per person p.a.	0.48	0.52	0.56
9. Inventories	118359	122286	126430
10. Gross Profit			
a) Gross Profit before Interest & Tax (Actual)	243079	233377	226926
b) Adjusted Gross Profit	262554	244681	251318
11. Net Profit			
a) Net profit after Tax & Interest (Actual)	153751	150317	163867
b) Adjusted Net Profit	173226	161620	160170
12. Dividends Declared	4020	4448	5563
13. Corporate Tax.	65749	56399	51049
% age of:			
a) N.P./Adjusted NP to paidup Capital	388.4/437.6	121.6/130.7	132.0/129.8
b) N.P./Adjusted N.P.to Net Worth	24.1/27.1	17.4/18.7	16.0/15.7
c) GP/Adjusted GP to Capital Emp.	35.0/37.8	27.2/28.6	23.5/24.9
d) Sales to Capital Emp.	81.1	77.6	76.3
e) G.P/Adjusted GP to Sales	43.2/46.7	35.1/36.8	29.5
f) Paid-up Capital/Loan Ratio.	0.13	0.31	0.23

Source: 1. Data as submitted by ONGC & annual reports of the companies.
2. There is no authorised Capital in respect of ONGC.
3. Adjusted/Gross Profits & Net Profits are as defined in the glossary of terms.

TABLE NO.5

FINANCIAL STRUCTURE

NAME OF THE COMPANY : OIL & NATURAL GAS COMMISSION (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	There is no authorised capital in respect of ONGC.		
2. i) Paid-up Capital	34285	34285	34285
ii) Preference Capital	-NIL-	-NIL-	-NIL-
iii) Reserve & Surpluses	561053	707782	863280
3. i) Total Loans	295793	346068	465709
ii) Of which Foreign	209682	251297	372811
4. Cash Credits/Advances from Banks/Others	368	800	NIL
5. Net Worth	591284	735406	890617
6. i) Gross Block	855368	1027270	1241400
ii) Less Depreciation	354366	469283	577152
iii) Net Fixed Assets	501002	557987	664248
iv) Working Capital	156393	167212	204755
v) Capital Empl.(iii+iv)	657395	725199	869003
7. i) Sales	518060	609684	684316
ii) Other Income	4679	1047	12922
Total	562739	610731	697238
8. i) Total Emoluments (incl. perks)	20786	22772	26341
ii) Of which Bonus	1721	1602	1665
iii) Average Emoluments per person p.a.	0.48	0.52	0.58
9. Inventories	107520	110196	115764
10. a) Gross Profit before Interest & Tax	233468	228918	217144
b) Adjusted Gross Profit	252962	240217	241531
11. a) Net Profit after Interest & Tax	148446	150753	160158
b) Adjusted Net Profit After Interest & Tax	167940	162051	156456
12. Dividends Declared	3600	4028	5143
13. Corporate Tax.	62050	53473	49300
% age of:			
a) N.P./Adjusted NP to paid-up Capital	432.9/489.8	439.7/472.7	467.1/456.3
b) N.P./Adjusted N.P.to Net Worth	25.1/28.4	20.4/22.0	18.0/17.6
c) GP/Adjusted GP to Capital Emp.	35.5/38.4	31.5/39.4	28.2/27.8
d) Sales to Capital Emp.	78.8	84.07	78.7
e) G.P/Adjusted GP to Sales	45.0/48.8	37.5/39.4	35.8/35.3
f) Paid-up Capital/Loan Ratio.	0.12	0.14	0.67

Source: 1. Data as supplied by the Company.
2. Adjusted/Gross & Net Profits are as defined in the glossary of terms.

TABLE NO.6

FINANCIAL STRUCTURE

NAME OF THE COMPANY : ONGC'S VIDESH LIMITED (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	3000	3000	3000
2. i) Paid-up Capital	2500	2500	2500
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	2767	2995	3337
3. i) Total Loans	-NIL-	-NIL-	-NIL-
ii) Of which Foreign	-NIL-	-NIL-	-NIL-
4. Cash Credits/Advances from Banks/Others	-NIL-	-NIL-	-NIL-
5. Net Worth	5266	5495	5718
6. i) Gross Block	2	4	6
ii) Less Depreciation	2	2	2
iii) Net Fixed Assets	-NIL-	2	4
iv) Working Capital	5266	5495	2771
v) Capital Empl.(iii+iv)	5266	5497	2775
7. i) Sales	--	--	--
ii) Other Income i.e.int.earned	505	499	532
Total	505	499	532
8. i) Total Emoluments (incl. perks)	7	8	15
ii) Of which Bonus	-NIL-	-NIL-	2
iii) Average Emoluments per person p.a.	0.68	0.75	0.72
9. Inventories	-NIL-	-NIL-	-NIL-
10. Gross Profit			
a) Gross Profit before Interest & Tax	491	481	492
b) Adjusted Gross Profit			
11. Net Profit			
a) Net Profit after Tax & Interest	245	228	342
b) Adjusted net Profit	--	--	--
12. Dividends Declared	-NIL-	-NIL-	-NIL-
13. Corporate Tax.	246	253	150
% age of:			
a) N.P./Adjusted NP to paidup Capital	9.8	9.1	13.7
b) N.P./Adjusted N.P.to Net Worth	4.6	4.1	6.0
c) GP/Adjusted GP toCapital Emp.	9.3	8.8	17.7
d) Sales to Capital Emp.	-NIL-	-NIL-	-NIL-
e) G.P/Adjusted GP to Sales	-NIL-	-NIL-	-NIL-
f) Paid-up Capital/Loan Ratio.	-NIL-	-NIL-	-NIL-

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profits & Net Profits are as defined in the glossary of terms.

TABLE NO.7

FINANCIAL STRUCTURE

NAME OF THE COMPANY : OIL INDIA LIMITED (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	2800	2800	2800
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	37590	43808	52044
3. i) Total Loans	6571	6413	8263
ii) Of which Foreign	831	4397	4857
4. Cash Credits/Advances from Banks/Others	--	--	--
5. Net Worth	40390	46608	54844
6. i) Gross Block	54133	61046	69209
ii) Less Depreciation	38504	46202	51939
iii) Net Fixed Assets	15629	14844	17270
iv) Working Capital	15338	19161	24588
v) Capital Empl.(iii+iv)	30967	34005	41858
7. i) Sales	44524	50740	51667
ii) Other Income	585	938	1755
Total	45109	51678	53422
8. i) Total Emoluments (incl. perks)	2524	3351	3759
ii) Of which Bonus	251	341	382
iii) Average Emoluments per person p.a.	0.29	0.38	0.43
9. Inventories	10839	10781	9946
10. Gross Profit			
a) Gross Profit before Tax & Intt.(Actual)	9120	9824	10701
b) Adjusted Gross Profit	9101	9829	10706
11. Net Profit			
a) Net Profit after Tax & Intt.(actual)	5041	6638	8656
b) Adjusted Net Profit	5060	6643	8661
12. Dividends Declared	420	420	420
13. Corporate Tax.	3453	2673	1599
% age of:			
a) N.P./Adjusted NP to Paid-up Capital	180.0/ 180.7	237.0/ 237.2	309.1
b) N.P./Adjusted N.P.to Net Worth	12.4	14.2	15.8
c) GP/Adjusted GP to Capital Emp.	29.4	28.8	25.6
d) Sales to Capital Emp.	143.7	149.2	123.4
e) G.P/Adjusted GP to Sales	20.5	19.4	20.7
f) Paid-up Capital/Loan Ratio.	0.42	0.44	0.33

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profits & Net Profits are as defined in the glossary of terms.

TABLE NO.8

FINANCIAL STRUCTURE

NAME OF THE COMPANY : GAS AUTHORITY OF INDIA LTD. (Rs./Lakhs)

	I T E M	1986-87	1987-88	1988-89
	(1)	(2)	(3)	(4)
1.	Authorised Capital	100000	100000	100000
2.	i) Paid-up Capital	61079	84032	84532
	ii) Preference Capital	--	--	--
	iii) Reserve & Surpluses	--	--	16430
3.	i) Total Loans	26057	46336	75354
	ii) Of which Foreign	2014	9594	17711
4.	Cash Credits/Advances from Banks/Others	--	--	--
5.	Net Worth	--	76698	71917
6.	i) Gross Block	1455	98861	112929
	ii) Less Depreciation	71	7272	19354
	iii) Net Fixed Assets	1384	91589	93575
	iv) Working Capital	--	-218	- 53
	v) Capital Empl.(iii+iv)	1384	91371	93522
7.	i) Sales	--	4026	32739
	ii) Other Income	--	--	6
	Total	--	4026	32745
8.	i) Total Emoluments (incl. perks)	--	20	121
	ii) Of which Bonus	--	--	--
	iii) Average Emoluments per person p.a.	--	0.43	0.49
9.	Inventories	--	1309	720
10.	Gross Profit			
	a) Gross Profit after Interest & Tax (actual)	--	-5846	-1411
	b) Adjusted Gross Profit	--	--	--
11.	Net Profit			
	a) Net Profit after Tax & Interest (actual)	--	-7302	-5289
	b) Adjusted Net Profit	--	--	--
12.	Dividends Declared	--	--	--
13.	Corporate Tax.	--	--	--
	% age of:-			
a)	N.P./Adjusted NP to paidup Capital	--	Neg.	Neg.
b)	N.P./Adjusted N.P.to Net Worth	--	Neg.	Neg.
c)	GP/Adjusted Capital Emp.	--	Neg.	Neg.
d)	Sales to Capital Emp.	--	4.4	35.0
e)	G.P./Adjusted GP to Sales	--	Neg.	Neg.
f)	Paid-up Capital/Loan Ratio.	2.34	1.81	1.12

Source: 1. Annual Report of the Company.
2. Gross & net loss are as given in the published Accounts.
3. Data for 1986-87 being incomplete has not been included in the consolidated position.

TABLE NO.9

CONSOLIDATED FINANCIAL STRUCTURE

REFINING AND MARKETING

(Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	46020	46020	52540
2. i) Paid-up Capital	32925	33225	40647
ii) Preference Capital	50	50	50
iii) Reserve & Surpluses	173228	235699	319583
3. i) Total Loans	141586	236220	315745
ii) Of which Foreign	38498	96409	193341
4. Cash Credits/Advances from Banks/Others	65912	28315	27946
5. Net Worth	205168	267950	359259
6. i) Gross Block	396069	445386	517696
ii) Less Depreciation	213532	249393	290306
iii) Net Fixed Assets	182537	195993	227390
iv) Working Capital	167051	243428	380519
v) Capital Empl.(iii+iv)	349588	439421	607909
7. i) Sales	2129647	2699962	2895228
ii) Other Income	10010	19176	29028
Total	2139657	2719138	2924256
8. i) Total Emoluments (incl. perks)	24000	26255	31699
ii) Of which Bonus	2610	2577	2744
iii) Average Emoluments per person p.a.	0.45	0.47	0.53
9. Inventories	289849	302998	318108
10. Gross Profit			
a) Gross Profit before Interest & Tax (actual)	105456	110129	140982
b) Adjusted Gross Profit	105763	110219	141256
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	58103	64619	90777
b) Adjusted Net Profit	58402	64699	91051
12. Dividends Declared	4750	5179	6419
13. Corporate Tax.	26241	22033	23949
% age of:			
a) NP/Adjusted NP to paidup Capital	176.2/177.1	194.2	223.0/223.7
b) N.P./Adjusted N.P.to Net Worth	28.4	24.1	25.3
c) GP/Adjusted Capital Emp.	30.1	25.0	23.2
d) Sales to Capital Emp.	609.1	614.4	476.3
e) G.P./Adjusted GP to Sales	5.0	4.0	4.9
f) Paid-up Capital/Loan Ratio.	0.23	0.16	0.12

Source: 1. Annual reports of the companies.
2. Adjusted/Gross & Net Profits are as defined in the glossary of terms.

TABLE NO.10

FINANCIAL STRUCTURE

NAME OF THE COMPANY : INDIAN OIL CORPORATION LTD. (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	15000	15000	15000
2. i) Paid-up Capital	12327	12327	12327
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	122336	161092	210060
3. i) Total Loans	59523	99371	196917
ii) Of which Foreign	30864	86503	189990
4. Cash Credits/Advances from Banks/Others	12144	14784	11771
5. Net Worth	134662	173419	222387
6. i) Gross Block	197360	218796	248585
ii) Less Depreciation	124519	143120	163324
iii) Net Fixed Assets	72841	75676	85261
iv) Working Capital	103727	179149	315003
v) Capital Empl.(iii+iv)	176568	254825	400264
7. i) Sales	1256056	1427108	1515074
ii) Other Income	7077	15592	23550
Total	1263133	1442701	1538624
8. i) Total Emoluments (incl. perks)	14319	15405	18591
ii) Of which Bonus	1652	1698	1763
iii) Average Emoluments per person p.a.	0.45	0.47	0.56
9. Inventories	182318	185913	191465
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	72749	66012	81947
b) Adjusted Gross Profit	72861	65945	82124
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	42822	40976	51433
b) Adjusted Net Profit	42934	40899	51610
12. Dividends Declared	1972	2219	2465
13. Corporate Tax.	24300	16200	16208
% age of:-			
a) NP/Adj.NP to paidup Capital	347.3/348.2	332.4/331.8	417.2/418.6
b) N.P./Adjusted N.P.to Net Worth	31.8	23.6	23.1
c) GP/Adjusted Capital Emp.	41.2	25.8	20.4
d) Sales to Capital Emp.	711.4	560.3	378.5
e) G.P./Adjusted GP to Sales	5.8	4.6	5.4
f) Paid-up Capital/Loan Ratio.	0.20	0.12	0.06

Source: 1. Annual Reports of the Company.
2. GP/Adjusted Gross Profit & Net Profits are as defined in the glossary of terms.

TABLE NO.11

FINANCIAL STRUCTURE

NAME OF THE COMPANY : BHARAT PETROLEUM CORNN.LTD. (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	2785	2785	2785
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	20624	30703	40578
3. i) Total Loans	10695	43824	47770
ii) Of which Foreign	4154	6407	--
4. Cash Credits/Advances from Banks/Others	31150	6288	7714
5. Net Worth	23409	33488	43364
i) Gross Block	59488	73420	95539
ii) Less Depreciation	32419	35574	43916
iii) Net Fixed Assets	27069	37846	51623
iv) Working Capital	22545	17102	22807
v) Capital Empl.(iii+iv)	49614	54948	74430
7. i) Sales	249968	405002	434868
ii) Other Income	1573	1947	2134
Total	251541	406949	437002
8. i) Total Emoluments (incl. perks)	3852	4720	6140
ii) Of which Bonus	428	511	525
iii) Average Emoluments per person p.a.	0.40	0.46	0.58
9. Inventories	23910	25682	30423
10. Gross Profit			
a) Gross Profit before Interest & Tax (actual)	10234	12679	16253
b) Adjusted Gross Profit	10248	12698	16361
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	6032	7604	10909
b) Adjusted Net Profit	6046	7623	10918
12. Dividends Declared	390	557	557
13. Corporate Tax.	820	1700	2100
% age of:-			
a) N.P./Adj. NP to paidup Capital	216.6/217.0	273.0/273.7	391.7/392.0
b) N.P./Adjusted N.P.to Net Worth	25.8	22.7	25.1
c) GP/Adjusted Capital Emp.	20.6	23.0	22.0
d) Sales to Capital Emp.	503.8	737.0	584.3
e) G.P./Adjusted GP to Sales	4.0	3.1	3.8
f) Paid-up Capital/Loan Ratio.	0.26	0.06	0.05

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross & Net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE

Table No.12

NAME OF THE COMPANY : HINDUSTAN PETROLEUM CORPORATION LTD. (Rs./Lakhs)

	I T E M	1986-87	1987-88	1988-89
	(1)	(2)	(3)	(4)
1.	Authorised Capital	10000	10000	10000
2.	i) Paid-up Capital	6384	6384	6384
	ii) Preference Capital	--	--	--
	iii) Reserve & Surpluses	17191	26710	43206
3.	i) Total Loans	35476	54672	40344
	ii) Of which Foreign	--	--	--
4.	Cash Credits/Advances from Banks/Others	15306	6812	5294
5.	Net Worth	22684	32306	48770
6.	i) Gross Block	84610	93035	107583
	ii) Less Depreciation	35775	45124	53296
	iii) Net Fixed Assets	48835	47911	54287
	iv) Working Capital	14636	24949	18350
	v) Capital Empl.(iii+iv)	63471	72860	72637
7.	i) Sales	349310	545070	586678
	ii) Other Income	748	932	1487
	Total	350058	546002	588165
8.	i) Total Emoluments (incl. perks)	3698	3737	4038
	ii) Of which Bonus	380	227	251
	iii) Average Emoluments per person p.a.	0.44	0.43	0.44
9.	Inventories	49026	45647	55799
10.	Gross Profit			
	a) Gross Profit after Interest & Tax (actual)	12038	18653	25854
	b) Adjusted Gross Profit	12043	18708	25904
11.	Net Profit			
	a) Net Profit after Tax & Interest (actual)	4805	10157	17390
	b) Adjusted Net Profit	4811	10212	17440
12.	Dividends Declared	638	638	894
13.	Corporate Tax.	130	2241	3267
	% age of:-			
a)	N.P./Adj. NP to paidup Capital	75.2	159.1/160.0	272.4/273.2
b)	N.P./Adjusted N.P.to Net Worth	21.2	31.4/31.6	35.6/35.8
c)	GP/Adjusted GP to Capital Emp.	19.0	25.6	35.6
d)	Sales to Capital Emp.	550.3	532.9	807.7
e)	G.P./Adjusted GP to Sales	3.4	4.8	4.4
f)	Paid-up Capital/Loan Ratio.	0.18	0.12	0.15

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE — Table No.13

NAME OF THE COMPANY : COCHIN REFINERIES LIMITED — (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	1500	1500	7500
2. i) Paid-up Capital	700	1000	6848
ii) Preference Capital	--	---	--
iii) Reserve & Surpluses	2370	4239	8215
3. i) Total Loans	21222	19899	12588
ii) Of which Foreign	3480	3499	3351
4. Cash Credits/Advances from Banks/Others	352	103	749
5. Net Worth	3069	5240	15062
6. i) Gross Block	21688	22774	23319
ii) Less Depreciation	7118	9161	10438
iii) Net Fixed Assets	14570	13613	12881
iv) Working Capital	7391	6588	6441
v) Capital Empl.(iii+iv)	21961	20201	19322
7. i) Sales	80313	103223	116416
ii) Other Income	114	36	318
Total	80427	103259	116734
8. i) Total Emoluments (incl. perks)	368	442	579
ii) Of which Bonus	8	11	27
iii) Average Emoluments per person p.a.	0.38	0.42	0.54
9. Inventories	10920	12579	9060
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	2954	5191	6202
b) Adjusted Gross Profit	2944	5200	6207
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	465	1954	4156
b) Adjusted Net Profit	455	1963	4161
12. Dividends Declared	84	84	180
13. Corporate Tax.	--	525	680
% age of:-			
a) NP/Adjusted NP to paidup Capital	66.4/65.0	195.4/196.3	60.7
b) N.P./Adjusted N.P.to Net Worth	15.1/14.8	37.3	27.6
c) GP/Adjusted GP to Capital Emp.	13.4	25.7	32.1
d) Sales to Capital Emp.	365.7	511.0	602.5
e) G.P./Adjusted GP to Sales	3.6	5.0	5.3
f) paid-up Capital/Loan Ratio.	0.03	0.05	0.54

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE

Table No.14

NAME OF THE COMPANY : MADRAS REFINERIES LIMITED

(Rs./Lakhs)

I T E M	1986-86	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	13500	13500	13500
2. i) Paid-up Capital	9825	9825	11399
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	5852	6834	9876
3. i) Total Loans	13817	17980	16915
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	--	--	--
5. Net Worth	15535	16422	21249
6. i) Gross Block	27328	30975	34887
ii) Less Depreciation	11561	13772	16287
iii) Net Fixed Assets	15767	17203	18600
iv) Working Capital	15236	12559	13814
v) Capital Empl.(iii+iv)	31003	29762	32414
7. i) Sales	110900	119880	133028
ii) Other Income	130	269	913
Total	111030	120149	133941
8. i) Total Emoluments (incl. perks)	453	461	518
ii) Of which Bonus	44	33	53
iii) Average Emoluments per person p.a.	0.42	0.41	0.43
9. Inventories	20558	29750	27583
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	5153	5164	7884
b) Adjusted Gross Profit	5300	5231	7900
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	2640	2456	5128
b) Adjusted Net Profit	2778	2523	5144
12. Dividends Declared	1474	1474	2085
13. Corporate Tax.	205	552	976
% age of:-			
a) N.P./Adjusted NP to paidup Capital	26.9/28.3	25.0/25.6	44.9/45.1
°) N.P./Adjusted N.P.to Net Worth	17.0/17.8	14.9/15.3	24.1
c) GP/Adjusted GP to Capital Emp.	16.6/17.6	17.3/17.5	24.3
d) Sales to Capital Emp.	357.7	402.7	410.4
e) G.P./Adjusted GP to Sales	4.6	4.3	5.9
f) Paid-up Capital/Loan Ratio.	0.71	0.54	0.67

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE

Table No.15

NAME OF THE COMPANY : IBP CO. LIMITED

(Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	500	500	500
2. i) Paid-up Capital	384	384	384
ii) Preference Capital	50	50	50
iii) Reserve & Surpluses	2490	3138	3936
3. i) Total Loans	28	28	28
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	516	317	1288
5. Net Worth	2924	3572	4195
6. i) Gross Block	2671	3193	4056
ii) Less Depreciation	1048	1221	1416
iii) Net Fixed Assets	1623	1972	2640
iv) Working Capital	1272	887	548
v) Capital Empl.(iii+iv)	2895	2859	3188
7. i) Sales	75230	85284	92302
ii) Other Income	242	326	525
Total	75472	85610	92827
8. i) Total Emoluments (incl. perks)	738	861	1090
ii) Of which Bonus	54	51	70
iii) Average Emoluments per person p.a.	0.40	0.44	0.54
9. Inventories	837	1001	1102
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	1286	1032	1273
b) Adjusted Gross Profit	1302	1034	1288
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	833	732	889
b) Adjusted Net Profit	849	734	904
12. Dividends Declared	80	83	90
13. Corporate Tax.	450	280	270
% age of:-			
a) NP/Adjusted NP to paidup Capital	191.9/195.6	168.6/169.1	204.8/208.3
b) N.P./Adjusted N.P.to Net Worth	28.4/29.0	20.4	21.2/21.5
c) GP/Adjusted GP to Capital Emp.	44.4/44.9	36.0	39.9/40.4
d) Sales to Capital Emp.	2598.6	2983.0	2895.3
e) G.P./Adjusted GP to Sales	1.7	1.2	1.4
f) Paid-up Capital/Loan Ratio.	15.5	15.5	15.5

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE — Table No.16

NAME OF THE COMPANY : LUBRIZOL INDIA LIMITED — (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	480	480	1000
2. i) Paid-up Capital	480	480	480
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	2060	2627	3252
3. i) Total Loans	710	609	507
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	421	--	1130
5. Net Worth	2450	3107	3732
6. i) Gross Block	2269	2495	2896
ii) Less Depreciation	751	999	1177
iii) Net Fixed Assets	1518	1496	1719
iv) Working Capital	2077	1994	3229
v) Capital Empl.(iii+iv)	3595	3490	4948
7. i) Sales	12605	13719	16116
ii) Other Income	114	58	86
Total	12719	13777	16202
8. i) Total Emoluments (incl. perks)	294	327	369
ii) Of which Bonus	13	13	15
iii) Average Emoluments per person p.a.	0.64	0.68	0.69
9. Inventories	2267	2226	2653
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	932	1277	1315
b) Adjusted Gross Profit	956	1282	1315
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	451	688	769
b) Adjusted Net Profit	475	692	769
12. Dividends Declared	108	120	144
13. Corporate Tax.	301	482	408
% age of:-			
a) NP/Adj. NP to paidup Capital	94.0/98.9	143.3/144.1	160.2
b) N.P./Adjusted N.P.to Net Worth	17.8/18.7	22.1/22.3	20.6
c) GP/Adjusted GP to Capital Emp.	25.9/26.5	36.6	26.6
d) Sales to Capital Emp.	350.6	393.0	325.7
e) G.P./Adjusted GP to Sales	7.4	9.3	8.2
f) Paid-up Capital to Loan Ratio	0.67	0.78	0.94

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE

Table No.17

NAME OF THE COMPANY : INDIAN OIL BLENDING LIMITED

(Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	40	40	40
2. i) Paid-up Capital	40	40	40
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	305	356	460
3. i) Total Loans	115	157	676
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	25	11	
5. Net Worth	345	396	500
6. i) Gross Block	655	698	831
ii) Less Depreciation	341	422	452
iii) Net Fixed Assets	314	276	379
iv) Working Capital	167	200	327
v) Capital Empl.(iii+iv)	481	476	706
7. i) Sales	565	676	746
ii) Other Income	12	16	15
Total	577	692	761
8. i) Total Emoluments (incl. perks)	278	312	374
ii) Of which Bonus	31	34	40
iii) Average Emoluments per person p.a.	0.48	0.47	0.49
9. Inventories	13	20	23
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	110	121	155
b) Adjusted Gross Profit	109	121	157
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	55	52	103
b) Adjusted Net Profit	54	53	105
12. Dividends Declared	4	4	4
13. Corporate Tax.	35	53	40
% age of:-			
a) N.P./Adj. NP to paidup Capital	137.5/135.0	130.0	257.5/262.5
b) N.P./Adjusted N.P.to Net Worth	15.9/15.6	13.1	20.6/21.0
c) GP/Adjusted GP to Capital Emp.	22.8	25.5	21.9/22.2
d) Sales to Capital Emp.	117.4	142.0	105.6
e) G.P./Adjusted GP to Sales	19.4	17.9	20.8/22.2
f) Paid-up Capital/Loan Ratio.	0.34	0.25	0.05

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE

Table No.18

NAME OF THE COMPANY : BONGAIGAON REFINERY & PETRO-CHEMICALS LIMITED (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	20000	20000	20000
2. i) Paid-up Capital	19082	19982	19982
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	3886	6102	7694
3. i) Total Loans	14197	10513	8313
ii) Of which Foreign	391	331	368
4. Cash Credits/Advances from Banks/Others	1267	28	2343
5. Net Worth	23442	25872	27563
6. i) Gross Block	24051	24367	38822
ii) Less Depreciation	7181	9226	12365
iii) Net Fixed Assets	16870	15141	26457
iv) Working Capital	8214	6259	9943
v) Capital Empl.(iii+iv)	25084	21400	36400
7. i) Sales	26731	34251	33856
ii) Other Income	127	222	135
Total	26858	34473	33991
8. i) Total Emoluments (incl. perks)	511	650	815
ii) Of which Bonus	17	46	21
iii) Average Emoluments per person p.a.	0.34	0.40	0.46
9. Inventories	8649	7584	11499
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	3662	3516	3839
b) Adjusted Gross Profit	3664	3511	3848
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	2325	2216	2192
b) Adjusted Net Profit	2327	2211	2202
12. Dividends Declared	--	--	599
13. Corporate Tax.	--	434	430
% age of:-			
a) NP/Adjusted NP to paidup Capital	11.6	11.0	11.0
b) N.P./Adjusted N.P.to Net Worth	9.9	8.6	8.0
c) GP/Adjusted GP to Capital Emp.	14.6	16.4	10.5
d) Sales to Capital Emp.	106.6	160.0	93.0
e) G.P./Adjusted GP to Sales	13.7	10.3	11.3
f) Paid-up Capital/Loan Ratio.	1.41	1.90	2.40

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE Table No.19

CONSOLIDATED: ENGINEERING SERVICES AND OTHER UNITS (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	950	950	1250
i) Paid-up Capital	679	679	679
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	7555	8999	9978
3. i) Total Loans	3738	4627	5728
ii) Of which Foreign	--	---	--
4. Cash Credits/Advances from Banks/Others	1856	1841	2288
5. Net Worth	5666	6408	6530
6. i) Gross Block	5403	5881	8371
ii) Less Depreciation	1861	2198	2519
iii) Net Fixed Assets	3542	3683	5852
iv) Working Capital	6693	7345	8060
v) Capital Empl.(iii+iv)	10235	11028	13912
7. i) Sales	19099	22129	27515
ii) Other Income	666	579	474
Total	19765	22708	27989
8. i) Total Emoluments (incl. perks)	2994	3450	4795
ii) Of which Bonus	131	132	114
iii) Average Emoluments per person p.a.	0.36	0.40	0.54
9. Inventories	2066	2276	3705
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	2666	2581	2353
b) Adjusted Gross Profit	2674	2627	2375
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	883	837	236
b) Adjusted Net Profit	890	884	258
12. Dividends Declared	100	104	113
13. Corporate Tax.	1134	848	982
% age of:-			
a) NP/Adj. NP to paidup Capital	130.0/131.0	123.2/130.1	34.8/38.0
b) N.P./Adjusted N.P.to Net Worth	15.6	13.0/13.7	3.6/4.0
c) GP/Adjusted GP to Capital Emp.	26.0	23.4/23.8	16.9
d) Sales to Capital Emp.	186.6	200.6	197.8
e) G.P./Adjusted GP to Sales	14.0	11.6/11.8	8.6
f) Paid up Capital to Loan Ratio	0.18	0.15	0.11

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE — Table No.20

NAME OF THE COMPANY : ENGINEERS INDIA LIMITED — (Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	200	200	200
2. i) Paid-up Capital	100	100	100
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	6148	7139	7623
3. i) Total Loans	600	575	500
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	2	18	--
5. Net Worth	6248	7239	7723
6. i) Gross Block	3099	3224	5101
ii) Less Depreciation	717	859	966
iii) Net Fixed Assets	2382	2365	4135
iv) Working Capital	3774	4066	4085
v) Capital Empl.(iii+iv)	6156	6431	8220
7. i) Sales	5422	5596	6297
ii) Other Income	581	444	470
Total	6003	6040	6767
8. i) Total Emoluments (incl. perks)	1935	2230	3172
ii) Of which Bonus	61	53	37
iii) Average Emoluments per person p.a.	0.53	0.61	0.88
9. Inventories	34	25	59
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	1916	1558	1190
b) Adjusted Gross Profit	1916	1587	1208
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	1093	1013	509
b) Adjusted Net Profit	1093	1043	527
12. Dividends Declared	20	20	25
13. Corporate Tax.	797	502	642
% age of:-			
a) NP/Adj.NP to paidup Capital	1093.0	1013.0/1043.0	509.0/527.0
b) N.P./Adjusted N.P.to Net Worth	17.4	13.9/14.4	6.6/6.8
c) GP/Adjusted GP to Capital Emp.	31.1	24.2/24.6	14.4/14.7
d) Sales to Capital Emp.	88.0	87.0	76.6
e) G.P./Adjusted GP to Sales	35.3	27.8	18.9/19.2
f) Paid-up Capital to Loan Ratio	0.17	0.17	0.20

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE

Table No.21

NAME OF THE COMPANY :BALMER LAWRIE & COMPANY LIMITED (Rs./Lakhs)

I T E M	1985-86	1986-87	1987-88
(1)	(2)	(3)	(4)
1. Authorised Capital	500	500	800
2. i) Paid-up Capital	402	402	402
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	1402	1855	2350
3. i) Total Loans	547	727	1092
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	1713	1778	2234
5. Net Worth	1804	2258	2752
6. i) Gross Block	2015	2366	2953
ii) Less Depreciation	923	1108	1313
iii) Net Fixed Assets	1092	1258	1640
iv) Working Capital	2712	3072	3810
v) Capital Empl.(iii+iv)	3804	4330	5450
7. i) Sales	13058	15964	20496
ii) Other Income	81	132	--
Total	13139	16092	20496
8. i) Total Emoluments (incl. perks)	748	904	1247
ii) Of which Bonus	56	64	64
iii) Average Emoluments per person p.a.	0.33	0.34	0.44
9. Inventories	1781	1990	3404
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	965	1263	1416
b) Adjusted Gross Profit	971	1280	1424
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	370	528	583
b) Adjusted Net Profit	376	545	591
12. Dividends Declared	80	84	88
13. Corporate Tax.	337	346	340
% age of:-			
a) NP/Adj.NP to paidup Capital	92.0/93.5	131.3/135.5	145.0/147.0
b) N.P./Adjusted N.P.to Net Worth	20.5/20.8	23.3/24.1	21.2/21.5
c) GP/Adjusted GP to Capital Emp.	25.3	29.1/29.5	26.0
d) Sales to Capital Emp.	343.2	368.6	376.0
e) G.P./Adjusted GP to Sales	7.3	7.9	6.9
f) Paid-up Capital to Loan Ratio	0.74	0.55	0.36

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

FINANCIAL STRUCTURE

Table No.22

NAME OF THE COMPANY :BIECCO LAWRIE & CO. LTD.

(Rs./Lakhs)

I T E M	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)
1. Authorised Capital	250	250	250
2. i) Paid-up Capital	177	177	177
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	5	5	5
3. i) Total Loans	2591	3225	4136
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	81	45	54
5. Net Worth	(-)2386	(-)3089	(-)3945
6. i) Gross Block	289	291	317
ii) Less Depreciation	221	231	240
iii) Net Fixed Assets	68	60	77
iv) Working Capital	207	207	165
v) Capital Empl.(iii+iv)	275	267	242
7. i) Sales	619	569	722
ii) Other Income	4	3	4
Total	623	572	726
8. i) Total Emoluments (incl. perks)	311	316	376
ii) Of which Bonus	14	15	13
iii) Average Emoluments per person p.a.	0.23	0.25	0.29
9. Inventories	251	253	242
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	(-)215	(-)240	(-)253
b) Adjusted Gross Profit	(-)213	(-)240	(-)257
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	(-)580	(-)704	(-)856
b) Adjusted Net Profit	(-)579	(-)704	(-)860
12. Dividends Declared	--	--	--
13. Corporate Tax	--	--	--
% age of:-			
a) NP/Adjusted NP to paidup Capital	Neg.	Neg.	Neg.
b) N.P./Adjusted to N.P.Net Worth	Neg.	Neg.	Neg.
c) GP/Adjusted GP to Capital Emp.	Neg.	Neg.	Neg.
d) Sales to Capital Emp.	225.0	213.1	298.3
e) G.P./Adjusted GP to Sales	Neg.	Neg.	Neg.
f) Paid-up Capital to Loan Ratio	0.06	0.05	0.04

Source: 1. Annual Reports of the Company.
2. Adjusted/Gross Profit & net Profit are as defined in the glossary of terms.

CAPITAL INVESTMENT OF THE PUBLIC/JOINT SECTOR UNDERTAKINGS AS ON 1-4-88 1-4-89 and 1-4-90

Name of the Undertaking	As on 1-4-1988				As on 1-4-1989				As on 1-4-1990			(Rs./Crores)
	Paid-up Capital	Loans	Total	Govt. Share	Paid-up Capital	Loans	Total	Govt. Share	Paid-up Capital	Loans	Total	Govt. Share
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
A. Exploration & Production	1236.2	3969.8	5206.0	2261.3	1241.2	5463.6	6704.8	1954.1	1241.2	6864.2	8105.4	2375.9
1. ONGC	342.9	3453.1	3796.0	1181.7	342.9	4653.2	4996.1	875.3	342.9	5779.7	6122.6	1277.0
2. ONGC's Videsh Ltd.	25.0	--	25.0	--	25.0	--	25.0	--	25.0	--	25.0	--
3. OIL	28.0	63.5	91.5	46.8	28.0	83.1	111.0	41.0	28.0	220.7	248.7	85.2
4. GAIL	840.3	453.2	1293.5	1032.8	845.3	727.3	1572.6	1037.8	845.3	863.8	1709.1	1013.7
B. Refining and Marketing	332.8	1815.5	2148.3	559.2	407.0	2790.9	3197.9	590.6	437.5	5950.7	6388.2	598.8
5. IOC	123.3	986.9	1110.2	136.9	123.3	1974.5	2097.8	130.1	123.3	5097.9	5221.2	123.3
6. BPCL	27.9	177.9	205.8	91.9	27.9	221.1	249.0	93.8	50.0	235.5	285.5	113.6
7. HPCL	63.8	293.1	356.9	137.5	63.8	288.1	351.9	138.5	63.8	261.3	325.1	134.0
8. CRL	10.0	170.0	180.0	41.7	68.5	125.9	194.4	79.2	68.9	120.0	188.9	76.6
9. MRL	98.3	179.8	278.1	145.6	114.0	169.2	283.2	143.5	114.1	189.1	303.2	140.8
10. IBP Co. Ltd.	4.3	0.3	4.6	2.7	4.3	0.3	4.6	2.7	7.4	33.0	40.4	4.7
11. Lubrizol India Ltd.	4.8	6.1	10.9	2.9	4.8	5.0	9.8	2.8	9.6	6.7	16.3	5.8
12. IOB	0.4	1.4	1.8	--	0.4	6.8	7.2	--	0.4	7.2	7.6	--
C. Petro-Chemicals	199.8	105.1	304.9	199.8	199.8	76.2	276.0	199.8	199.8	44.6	244.4	199.8
13. BRPL	199.8	105.1	304.9	199.8	199.8	76.2	276.0	199.8	199.8	44.6	244.4	199.8
D. Engineering Unit	6.8	36.4	43.2	22.3	6.8	45.8	52.6	24.9	11.7	51.3	63.0	25.1
14. EIL	1.0	5.8	6.8	1.0	1.0	5.0	6.0	1.0	1.0	4.3	5.3	1.0
15. Balmer Lawrie Ltd.	4.0	10.7	14.7	--	4.0	18.3	22.3	--	8.7	19.4	28.1	--
16. Biecco Lawrie Ltd.	1.8	19.9	21.7	21.3	1.8	22.5	24.3	23.9	2.0	27.6	29.6	24.1
TOTAL (A+B+C+D)	1775.6	5926.8	7702.4	3042.6 (39.5%)	1854.8	8376.5	10231.3	2769.4 (27.1%)	1890.2	12910.8	14801.0	3199.6 (21.6%)

Note : 1. Figures in brackets indicate the %age share of the Government.
2. Paid-up Capital of IBP Co. Ltd include 0.50 Crores as preference share Capital.

GLOSSARY OF TERMS USED IN THE "ANNUAL REPORT ANALYSIS"

1. Loans : These include both secured and unsecured loans but exclude interest accured, if any, included in the loans.

2. Net Worth : This represents paid-up capital plus free reserves less accumulated losses (deficit) and deferred revenue expenditure remaining unamortised

3. Capital Employed : This means gross block less accumulated depreciation there-on plus working capital.

4. Working Capital : Means all current assets, loans & advances deposits, investment (other than trade investments) less current liabilities and provisions (excluding cash credit & bank overdrafts and provision for gratuiry.

5. Sales : Means Net sales turnover i.e. after excluding trade discounts and products used for internal consumption.

6. Adjusted Gross profit : Represents excess of Income over expenditure after providing for interest on loans, taxes, appropriation to reserves, charges pertaining to previous years, bad debts, donations, exchange fluctuations, loss on disposal of Assets, Dividends etc.

7. Adjusted Net Profit : Represents the figure arrived at after deducting from the adjusted gross profit interest on loans and taxes but before appropriation to reserves.

8. Dividend Declared : Includes also preference dividend, if any,

9. Gross Profit & Net Profit : They are as given in the Annual Accounts of the Companies.

APPENDIX

APPENDIX

(iii) PREFIXES USED IN METRIC TABLES

Prefix	: Meaning	
Milli	: One Thousandth	(1/1000 = .001).
Centi	: One Hundredth	(1/100 = .01).
Deci	: One Tenth	(1/10 = .1).
Unit	: One	(1).
Deka	: Ten	(10).
Hecto	: One Hundred	(100).
Kilo	: One Thousand	(1,000).
Mega	: One Million	(1000,000).

(iv) Others

API	: American Petroleum Institute.
AFRA	: Average Freight Rate Assessment.
CIF	: Cost, Insurance and Freight.
Crores	: 10 million/100 Lakhs.
DWT	: Dead Weight Tonnage.
FOB	: Free on Board.
GP	: General Purpose (16, 500-24, 999 dwt).
LV	: Low Viscosity.
HV	: High Viscosity.
HVI	: High Viscosity Index.
KL	: Kilometre.
LR I	: Large Range I (45,000-79, 999 dwt).
LR II	: Large Range II (80,000-1, 59,999 dwt).
LVI	: Medium Range (25,000-49, 999 dwt).
MT	: Metric Ton.
MTPA	: Million Tonnes Per Annum.
MV	: Medium Viscosity.
MVI	: Medium Viscosity Index.
R&D	: Research & Development.
ULCC	: Ultra Large Crude Carrier (320,000-549,999 dwt).
VLCC	: Very Large Crude Carrier (160,000 dwt and more).
NA	: Not available.
-	: Nil.
Neg	: Negligible.
Billion	: 10/9 or one thousand Million.
Trillion	: 10/12 or one million million.
P	: Provisional.

METRIC UNITS

LINER

10 Millimetres	=	1 Centimetre.
10 Centimetres	=	1 Decimetre.
10 Decimetres	=	1 Metre.
10 Metres	=	1 Decametre.
10 Decametres	=	1 Hectometre.
10 Hectometres	=	1 Kilometre.

AREA

100 Sq. Millimetres	=	1 Sq. Centimetre.
100 Sq. Centrimetres	=	1 Sq. Decimetre.
100 Sq. Decimetres	=	1 Sq. Metre.
100 Sq. Metres	=	1 Sq. Decimetre - 1 Acre.
100 Sq. Acres	=	1 Sq. Hectometre.1 Hectare.
100 Hectares	=	1 Sq. Kilometre.

WEIGHT

10 Milligrams	=	1 Centigram.
10 Centigrams	=	1 Decigram.
10 Decigrams	=	1 Gram.
10 Grams	=	1 Decagram.
10 Decagrams	=	1 Hectogram.
10 Hectograms	=	1 Kilogram.
100 Kilograms	=	1 Quintal.
1000 Kilograms	=	1 Matric Tonne.

CAPACITY

10 Millilitres	=	1 Centilitre.
10 Centilitres	=	1 Decilitre.
10 Decilitres	=	1 Litre.
10 Litres	=	1 Decalitre.
10 Decalitre	=	1 Hectolitre.
10 Hectolitres	=	1 Kilolitre.

VOLUME

1000 Cubic Millimetres	=	1 Cubic Centimetre.
1000 Cubic Centimetres	=	1 Cubic Decimetre.
1000 Cubic Decimetres	=	1 Cubic Metre.

CONVERSION FACTORS USED IN THE OIL TRADE LINEAR AND SQUARE MEASURES.

LENGTH

1 Inch	= 25.4 Millimetres (mm) = 0.0254 Metre.
1 Foot	= 12 Inches. = 0.333333 Yard. = 0.3048 Metre (m).
1 Yard	= 36 Inches. = 3 Feet. = 0.9144 Metre (m).
1 Metre	= 39.3701 Inches. = 3.28084 Feet. = 1.09361 Yards. = 0.001 Kilometre (km).
1 Kilometre	= 1000 Metre (m). = 0.621371 Mile.
1 Mile	= 1760 Yards. = 1.60934 Kilometres (km).
1 International Nautical Mile	= 6076.12 Feet. = 1.852 Kilometres (km). = 1.5152 statute mile.

AREA

1 Square Inch	= 645.16 Square Millimetres (mm2).
1 Square Foot	= 0.0929030 Square Metre (m2).
1 Square Yard	= 9 Square Feet. = 0.836127 Square Metre (m2).
1 Square Metre	= 10,7639 Square Feet. = 1.19599 Square Yards.
1 Acre	= 4840 Square Yards. = 4046.86 Square Metres(m2). = 0.404686 Hectares.
1 Hectare	= 10,000 Square Metres (m2). = 2.47105 Acres. = 0.01 Square Kilometre (km2).
1 Square Kilometre	= 100 Hectares. = 0.386102 Square Mile.
1 Square Mile	= 640 Acres. = 258.999 Hectares. = 2.58999 Square Kilometres (km2).

MASS WEIGHTS

1 Ounce	=	28.3495 Grams (g).
1 Pound	=	0.453592 Kilogram (kg.).
	=	0.00892857 Hundred Weight.
1 Kilogram	=	2.20462 Pounds.
	=	0.01 Quintal.
1 Hundred Weight (cwt)	=	112 Pounds.
	=	50.8023 Kilograms (kg.).
1 American (Short) Ton	=	2000 Pounds.
	=	0.907185 Tonne.
	=	0.892857 Long Ton.
1 Tonne (Metric Ton)	=	2204.62 Pounds.
	=	1000 Kilograms (kg.).
	=	1.10231 Short Tons.
	=	0.984207 Long Ton.
1 Imperial (Long) Ton	=	2240 Pounds.
	=	1.12 Short Tons.
	=	1.01605 Tonnes.

ENERGY AND POWER

1 International Table (IT) Calorie	=	4.1868 Joules (J).
115 C calorie	=	4.1855 Joules (J).
1 Thermochemical Calorie	=	4.184 Joules (J).
1 Kilo Calorie (IT)	=	1000 Calories.
	=	3.96832 British Thermal Units.
	=	1.163 Watt Hours.
	=	1 Thermie.
1 Kilowatt Hour	=	3412.14 British Thermal Units.
	=	859.845 Kilocalories.
	=	3.6 Megajoules (MJ).
		1.34102 Horse Power Hours.
1 Therm	=	100,000 British Thermal Units. (BTU).
	=	105.506 Megajoules (MJ).
	=	29.3071 Kilowatt Hours.
	=	25.1996 Thermies.
	=	25200 Kilocalories.
1 Metric Horsepower (Pferdestaerke or Cheval Vapeur)	=	735.499 Watts (W).
	=	542.476 Foot Pounds Force/Second.
	=	0.986320 Imperial Horse Power.
1 Imperial Horsepower	=	745.700 Watts (W).
	=	550 Foot Pounds Force/Second.
	=	1.01387 Metric Horse Power.
1 Kilowatt	=	737.562 Foot POnunds Force/Second.
	=	1.35962 Metric Horsepower.
	=	1.34102 Imperial Horsepower.
	=	1000 Watts.
1 BTU	=	0.252 Kilocalories.
	=	1.055 Kilojoules.

CUBIC MEASURES

VOLUME

1 Cubic Inch	=	16.3871 Cubic Centimetres (cm3)
1 Pint	=	0.568261 Cubic Decimetres (dm3) or Litres.
1 Litre	=	61.024 Cubic Inches.
	=	1.75975 Pints.
	=	1 Cubic Decimetre (dm3).
	=	0.264172 American Gallons.
	=	0.219963 Imperial Gallons.
	=	0.0353147 Cubic Foot.
1 Hectolitre	=	100 Cubic Decimetres (dm3) or
	=	100 Litres.
1 American Gallon	=	231 Cubic Inches.
	=	3.78541 Cubic Decimetres or Litres.
	=	0.832674 Imperial Gallon.
	=	0.133681 Cubic Foot.
	=	0.0238095 American Barrel.
	=	0.00378541 Cubic Metre (m3).
1 Imperial Gallon	=	277.420 Cubic Inches.
	=	4.54609 Cubic Decimetres (dm3) or Litres.
	=	1.20095 American Gallon.
	=	0.160544 Cubic Foot.
	=	0.02894 American Barrel.
	=	0.00454609 Cubic Metre (m3).
1 Cubic Foot	=	28.3168 Cubic Decimetres (dm3) or Litres.
	=	7.48052 American Gallons.
	=	6.22883 Imperial Gallons.
	=	0.17811 American Barrel.
	=	0.0283168 Cubic Metre (m3).
1 American Barrel	=	9702 Cubic Inches.
	=	158.987 Cubic Decimetres (dm3) or Litres.
	=	42 American Gallons.
	=	34.9726 Imperial Gallons.
	=	5.6146 Cubic Feet.
	=	0.158987 Cubic Metre (m3).
1 Cubic Metre	=	1000 Litres.
	=	264.172 Americal Gallons.
	=	219.969 Imperial Gallons.
	=	35.3147 Cubic Feet.
	=	6.28981 American Barrels.
1 Kilolitre	=	1000 Cubic Decimetres (dm3) or Litres.
	=	6.28981 American Barrels.
1 Gross Ton (Shipping)	=	2.83168 Cubic Metres or 100 cubic. Feet of Permanently Enclosed Space.
1 Ton of Liquified Methane	=	Approx. 16 Barrels.
	=	Approx. 1400 Cubic Metres of Natural Gas Depending Upon Methane Content.

PRODUCT CONVERSION FACTOR

(Conversion Factor From Volume To Tonnes At Natural Temp.)

PRODUCTS	Litres to Metric Tonnes	Tonnes per K.L.	American Barrels to Matric tonnes
1.	2.	3.	4.
Avitation Spirit 100/130	1421	0.7034	8.94
Avitation Spirit 114/145	1449	0.6901	9.11
Avitation Spirit 73 ON	1432	0.6983	9.01
Motor Spirit 79 ON	1427	0.7008	8.98
Motor Spirit 80 ON	1427	0.7008	8.98
Motor Spirit 93 ON	1386	0.7215	8.72
Motor Spirit 95 ON	1359	0.7358	8.55
Motor Spirit 83 ON	1411	0.7087	8.88
JP-4	1384	0.7225	8.71
JP-5	1273	0.7855	8.01
Avitation Turbine	1288	0.7764	8.10
Naphtha	1467	0.6817	9.23
Power Alcohol	1286	0.7776	8.09
Benzol	1154	0.8666	7.26
SBP Spirit/Hexane	1457	0.6863	9.16
Mineral Turpentine (Laws 140/205)	1302	0.7680	8.19
Liquified Petroleum Gas	1785	0.5602	11.23
Superior Kerosene	1285	0.7782	8.08
Inferior Kerosene	1265	0.7905	7.96
Power Kerosene (Vap. Oil)	1251	0.7994	7.87
High Speed Diesel	1210	0.8263	7.61
Light Diesel Oil	1172	0.8532	7.37
Malarial Oil	1172	0.8532	7.37
Special Larvicides	1175	0.8511	7.39
Furnace Oil	1071	0.9337	6.74
Tea Drier Oil	1071	0.9337	6.74
Hot Heavy Stock/LSHS	1017	0.9833	6.40
Refinery Gas/Ref. Boiler Fuel	1071	0.9337	6.74
Lubricants/Greases	1114	0.8977	7.01
Jute Batching Oil/ Wash Oils	1167	0.8569	7.34
Bitumen	1002	0.9980	6.30
SBP/Alcohol Mixture	1414	0.7072	8.89
Methanol Mixture	1106	0.9042	6.96
Carbon Black Feed Stock	1134	0.8818	7.13
Carburetter Testing Fluid	1388	0.7205	8.73
Benzene	1131	0.8812	7.05
Toluene	1148	0.8711	7.19
Demineralised Water	1002	0.9930	6.30
S. Glass Kleanzit	1003	0.9970	6.31
Miscellaneous	1114	0.8977	7.01
Wax/P.Cock/Chemicals	1114	0.8977	7.01
Aromex	1221	0.8190	7.68
Linear Alkyl Benzen Feed Stock	1205	0.8239	7.58

VOLUME PER METRIC TON OF PETROLEUM PRODUCTS

Products	Kilolitre	Imperial Gallon	U.S. Gallon	Barrel
1.	2.	3.	4.	5.
Liquified Pet. Gas.	1.8519	407.365	489.213	11.648
Avitation Spirit	1.3699	301.332	361.873	8.613
Natural Gasoline	1.3514	297.265	356.990	8.496
Motor Spirit	1.3514	297.265	356.990	8.496
Kerosene	1.2346	271.569	326.137	7.764
Jet Fuel	1.2346	271.569	326.137	7.764
Distillate Fuel Oil	1.1494	252.415	293.522	6.988
Lubricating Oil	1.1111	252.845	303.647	7.231
Fuel Oil N.O.S.	1.0939	241.727	290.301	6.911
Residuel Fuel Oils	1.0526	231.551	278.071	6.623
Asphalt and Bitumen	0.9615	211.515	254.013	6.050
Crude Oil	1.1856	260.910	313.340	7.441

CONVERSION FACTORS FOR DUTY REDUCTION FROM 15°c TO 29.5° c

Product	Conversion Factor
1. Avitation Spirit 100/130	0.9827
2. Avitation Spirit 114/145	0.9820
3. Avitation Spirit 73 Clear	0.9824
4. Avitation Turbine Fuel	0.9862
5. Motor Spirit 83	0.9830
6. Motor Spirit 93	0.9836
7. H.S.D.O.	0.9879
8. Kerosene	0.9864
9. Light Diesel Oil	0.9877
10. Furnace Oil	0.9899
11. Special Boiling Point Spirit 55/115	0.9820
12. Special Boiling Point Spirit 64/69	0.9806
13. Solvent 1425	0.9820
14. Hexane	0.9806

PETROLEUM SPECIFIC GRAVITIES.

Degrees A.P.I.	Specific Gravity	Barrels per tonne*	Long ton*
25	0.9042	6.98	7.09
26	0.8984	7.02	7.13
27	0.8927	7.06	7.18
28	0.8871	7.10	7.22
29	0.8816	7.15	7.27
30	0.8762	7.19	7.31
31	0.8708	7.24	7.36
32	0.8654	7.28	7.40
33	0.8602	7.33	7.45
34	0.8550	7.37	7.49
35	0.8499	7.42	7.54
36	0.8448	7.46	7.58
37	0.8398	7.51	7.63
38	0.8348	7.55	7.67
39	0.8299	7.60	7.72
40	0.8251	7.64	7.76
41	0.8203	7.69	7.81
42	0.8156	7.73	7.85

* Approximate figure at 15.6 degrees C or 60 degree F.

PRODUCT SPECIFIC GRAVITY RANGES

PRODUCTS	Specific Gravity	Barrels per tonne
Crude Oils	0.80-0.97	8.0-6.6
Avitation gasolines	0.70-0.78	9.1-8.2
Motor gasolines	0.71-0.79	9.0-8.1
Kerosene	0.78-0.84	8.2-7.6
Gas Oils	0.82-0.90	7.8-7.1
Diesel Oils	0.82-0.92	7.8-6.9
Lubricating Oils	0.85-0.95	7.5-6.7
Fuel Oils	0.92-0.99	6.9-6.5
Asphaltic bitumens	1.00-1.10	6.4-5.8

CRUDE OIL CONVERSIONS@

To convert these into these	Metric tons	Barrels	Kilo litres	1,000 Imp.Gallon	1,000 U.S.Gallon
Metric Tons	1	7.33	1.16	0.256	0.308
Barrels	0.136	1	0.159	0.035	0.042
Kilolitres	0.863	6.29	1	0.220	0.264
1,000 Imp. Gallons	3.91	28.6	4.55	1	1.201
1,000 U.S.Gallons	3.25	23.8	3.79	0.833	1

@ = Based on World Average gravity (Excluding Natural Gas liquids

TO CONVERT ONE METRIC TONNE OF PETROLEUM PRODUCTS TO ONE TONNE OF OIL EQUIVALENT MULTIPLY BY

PRODUCTS	MULTIPLIERS
L.P.G.	1.130
Naphtha	1.075
Avitation gasoline	1.070
Motor gasoline	1.070
Jet Fuel	1.065
Kerosene	1.045
Gas/diesel	1.035
Residuel Fuel Oils	0.985
Others	0.960

Average International Calorific Value of different Fuels

	Kcals/Kg. Mcals/Tonne	BTUS/Kg.
1.	2.	3.
A. Oil Equivalence:		
Average Crude Oil/NGLS (a)	10,300	40,870
United Nations	10,175	40,375
B. Oils Products		
NGL	12,135	48,150
Motor Gasoline	11,135	44,190
Kerosene	10,638	42,210
Jet Fuel	11,790	46,790
Gas Oil	10,790	42,820
Fuel Oil	10,440	41,430
C. Coal Equvalence:		
Average Hard Coal (b)	7,000	27,775
D. I N D I A:		
Hard Coal	5,000	19,840
Lignite-Brown Coal	2,310	9,16
Firewood @	4,750	18,848
Charcoal @	6,900	27,379
E. Natural Gas-Production: (Average) India		Kcals/Cu.metre 8,000-9,480
F. Electricity.		
Output Basis (c)		860
Fuel Input basis (d)		2,500-2,700

(a) Represent average global factor for crude oil/NGL production. For a Speicfic crude oil relevant conversion factor may have to be used.

(b) Factor used by United Nations to represent average calorific value of hard coals for purposes of standardising coal production to hard coal equivalent base.

(c) Calorific value of 1 kwh of electricity.

(d) Represents Kcals of hydro-carbon energies required to produce 1 kwh of electricity.

@ = As per Report of Fuel Policy Commitee 1974.

Conversion Factor: 1 Kcal = 4.19 Kjouloes.

Coefficients Used To Convert From Original Units into Standard Coal Equivalents.

Products	Hard Coal	Lignite Brown Coal	Fuel wood
1.	2.	3.	4.
A. PRIMARY SOLIDS			
1. Standard Factor	1.000	0.385	0.333
2. India	0.714	0.330	
B. OTHERS			Hydrocarbons
1. Petroleum Crude			1.454
2. Natural Gas Liquids (wf.Av.)			1.542
3. Gasolines			1.500
4. Kerosene & Jet fuel			1.474
5. Gas=Diesel Oil			1.450
6. Residuel Fuel Oil			1.416
7. Liquified Petroleum Gases			1.554
8. Natural Gasoline			1.532
9. Condensate			1.512
10. Other Natural Gas Liquids			1.512
11. Natural Gas (in Terjouls)*			34.121
12. Other Gases (" " ")*			34.121
13. Hydro, Nuclear and Geothermal Electricity (in 1,000 kwh)			0.123

* = The average calorific value of gas is measured in Kcal/m3 (st.) i.e. in Kcal per cubic metre of gas under standard conditions of 15°c, 013.25 mbar, dry.

COAL REPLACEMENT AND EQUIVALENTS OF DIFFERENT FUELS

Fuels	Original Unit	Unit coal Equivalent in Million Tonnes (mtce)	Coal Replacement in Million Tonnes (mtcr)
1.	2.	3.	4.
Coal (coking 6640 Kcal/kg., Non-coking coal Used in steam generation(5000 Kcal/Kg.)	1mt	1.0	1.0
Hard Coke	1mt	1.3	1.3
Soft Coke	1mt	1.5	1.3
Firewood (4750 Kcal/Kg.)	1mt	0.95	0.95
Char Coal (6900 Kcal/Kg.)	1mt	1.0	1.0
2. OIL PRODUCTS : 10,000 Kcal/Kg.			
Black Products (i.e. Fuel Oil; F.O.; Refinery Fuel, LSHS,HHS).	1mt	2.0	2.0
Kerosene & LPG	1mt	2.0	8.0
HSDO & LDO	1mt	2.0	9.0
Motor Spirit & Jet Fuel	1mt	2.0	7.5
Natural Gas (9000 Kcal/Kg.)	109 x m3	1.8	3.6
Electricity	109 kwh	1.0	1.0

m = Million
mt = Million Tonnes
Source = Fuel Policy Commitee = 1974

mtce = Million Tonnes of Coal Equivalent

mtcr = Million Tonnes of Coal Replacement.

Approximate Calorific Equivalents
(Oil = 10,000 K Cal/Kg.)

Items	Million Tonnes of Oil equals
1. Heat Units	= 40 million BTU = 397 million therms = 10,000 teracalories
2. Soild Fuels	= 1.5 million tonnes of Coal = 3.0 million tonnes of lignite
3. Natural Gas (1 cub. ft. = 1000 BTU)	= (1 Cub metre = 9000 K cal). = 1.111 thousand million cub metres = 39.2 thousand million cub. feet = 107 million cubic feet/day of a year
4. Electricity (1 Kwh = 3412 BTU) (1 Kwh = 860 Kcal)	= 12 thousand million KWH

Heat Units and others Expressed in Terms of million Tonnes of Oil

Itmes	Million tonnes of oil equals
1. Heat Units	
10 million million BTU	0.25
100 million therms	0.25
10.000 teracalories	1.00
2. Solid Fuels	
1 million tonnes of coal	0.67
1 million tonnes of lignite approximates to	0.33
3. Natural Gas	
1 thousand million cub. metres (BCM)	0.90
4. Town Gas	
1 thousand million cub. metres (BCM)	0.42
5. Electricity	
12 thousand million KWH	0.86

One million tonnes of oil produces about 4000 million units (KWH) of electricity in a modern power station.
Source : BP Statistical Review of World Energy.

EXCHANGE RATES : 1946/1989-90

(Rs. per U.S. Dollar)

Year	Calendar Year					Financial Year	
	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Average for the year	Year	average for the year
1.	2.	3.	4.	5.	6.	7.	8.
1946	n.a.	n.a.	n.a.	3.30852	3.30852	1946-47	n.a.
1947	3.30852	3.30852	3.30852	3.30852	3.30852	1947-48	3.30852
1948	3.30852	3.30852	3.30852	3.30852	3.30852	1948-49	3.30852
1949	3.30852	3.30852	3.49275	4.76190	3.71792	1949-50	4.08127
1950	4.76190	4.76190	4.76190	4.76190	4.76190	1950-51	4.76190
1951	4.76190	4.76190	4.76190	4.76190	4.76190	1951-52	4.76190
1952	4.76190	4.76190	4.76190	4.76190	4.76190	1952-53	4.76190
1953	4.76190	4.76190	4.76190	4.76190	4.76190	1953-54	4.76190
1954	4.76190	4.76190	4.76190	4.76190	4.76190	1954-55	4.76190
1955	4.76190	4.76190	4.76190	4.76190	4.76190	1955-56	4.76190
1956	4.76190	4.76190	4.76190	4.76190	4.76190	1956-57	4.76190
1957	4.76190	4.76190	4.76190	4.76190	4.76190	1957-58	4.76190
1958	4.76190	4.76190	4.76190	4.76190	4.76190	1958-59	4.76190
1959	4.76190	4.76190	4.76190	4.76190	4.76190	1959-60	4.76190
1960	4.76190	4.76190	4.76190	4.76190	4.76190	1960-61	4.76190
1961	4.76190	4.76190	4.76190	4.76190	4.76190	1961-62	4.76190
1962	4.76190	4.76190	4.76190	4.76190	4.76190	1962-63	4.76190
1963	4.76190	4.76190	4.76190	4.76190	4.76190	1963-64	4.76190
1964	4.76190	4.76190	4.76190	4.76190	4.76190	1964-65	4.76190
1965	4.76190	4.76190	4.76190	4.76190	4.76190	1965-66	4.76190
1966	4.76190	5.51413	7.50000	7.50000	6.31901	1966-67	7.00353
1967	7.50000	7.50000	7.50000	7.50000	7.50000	1967-68	7.50000
1968	7.50000	7.50000	7.50000	7.50000	7.50000	1968-69	7.50000
1969	7.50000	7.50000	7.50000	7.50000	7.50000	1969-70	7.50000
1970	7.50000	7.50000	7.50000	7.50000	7.50000	1970-71	7.50000

EXCHANGE RATES : 1946/1989-90

(Rs. per U.S. Dollar)

Year	Calendar Year					Financial Year	
	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Average for the year	Year	average for the year
1.	2.	3.	4.	5.	6.	7.	8.
1971	7.500	7.500	7.500	7.500	7.500	1971-72	7.44950
1972	7.298	7.297	7.759	8.023	7.594	1972-73	7.73025
1973	7.842	7.499	7.651	7.976	7.742	1973-74	7.86275
1974	8.325	7.912	8.073	8.096	8.102	1974-75	7.97550
1975	7.821	8.053	8.716	8.913	8.376	1975-76	8.65325
1976	8.931	9.063	8.967	8.881	8.960	1976-77	8.93850
1977	8.843	8.814	8.733	8.565	8.739	1977-78	8.56250
1978	8.138	8.465	8.051	8.118	8.193	1978-79	8.20625
1979	8.191	8.176	7.998	8.138	8.126	1979-80	8.07625
1980	7.993	7.921	7.747	7.791	7.863	1980-81	7.89278
1981	8.112	8.410	8.984	9.128	8.659	1981-82	7.92925
1982	9.195	9.354	9.570	9.702	9.455	1982-83	9.62850
1983	9.888	10.008	10.148	10.352	10.099	1983-84	10.31225
1984	10.741	10.972	11.579	12.158	11.363	1984-85	11.88675
1985	12.838	12.498	12.048	12.091	12.369	1985-86	12.23725
1986	12.312	12.500	12.592	13.039	12.611	1986-87	12.78650
1987	13.015	12.781	13.049	13.000	12.962	1987-88	12.96825
1988	13.043	13.429	14.276	14.920	13.917	1988-89	14.47650
1989	15.281	16.105	16.605	16.911	16.226	1989-90	16.6625
1990	17.029						

Notes: (1) A new value of the Indian Re.of 7.50 per U.S. Dollar was agreed upon with the Fund effective June 6, 1966. Previously the year value was 4.7619 rupees per U.S.Dollar from September 22, 1949 to June 5, 1966 and 3.30852 rupees per U.S. Dollar from December 18, 1946 to September 21, 1949.

(2) Exchange rates for the years 1970 and 1971 are based on 'Trade Conversion Factors'.

(3) Exchange rates for the year 1972 onwards are based on Par rates/market rates.

e = estimated.

Source: International Financial Statistics.