

INDIAN PETROLEUM & NATURAL GAS STATISTICS

1990-91

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

P R E F A C E

The present publication is the twenty-fifth of the annual series brought out by the Economics & Statistics Division which gives detailed petroleum and natural gas statistics. This publication, in line with our previous annual publications, provides petroleum and natural gas statistics both on financial as well as calendar year basis, the former to meet the requirements of national planning and administration and the latter 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 suggestions from users for rectification of any error or omission noticed by them.

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

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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*	1990-91*
1.	2.	3.	4.	5.	6.	7.	8.	9.	10
1.Geographical Area	M.Sq.km.	3.29	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	827.1	843.9
3.Gross National Product at factor cost									
i)At current prices	Rs.Crores	122772	207153	232047	257250	291647	349105	392524	N.A.
ii)At 1980-81 prices	"	122772	149292	155399	160975	167703	185543	195237	N.A.
4.Net National Product at factor cost:									
i)At current prices	Rs.Crores	110685	185062	205810	227427	257961	310015	346994	N.A.
ii)At 1980-81 prices	"	110685	133844	139059	143682	149408	166200	174798	N.A.
5.Per capita Net National Product:									
i)At current prices	Rupees	1630.1	2504.2	2726.0	2953.6	3286.1	3875.2	4252.4	N.A.
ii)At 1980-81 prices	"	1630.1	1811.2	1841.8	1866.0	1903.3	2077.5	2142.1	N.A.
6.Foreign Exchange Reserves:									
i)Gold +	Rs.Crores	225.6	245.8	274.3	274.3	274.3	274.3	280.7	6828.3
ii)SDR	Mn.of SDRS	490.5	146.5	115.1	139.4	69.7	79.5	81.9	75.9
iii)Foreign Exchange **	Rs. Cr.	4822.1	6816.8	7384.4	7645.2	7287.1	6604.6	5787.2	4388.1
7.Foreign Trade:									
i)Import	Rs.Crores	12544	18680	21164	22669	22244	28235	35412	43193
ii)Export	"	6576	11959	11578	13315	15674	20231	27681	32553
iii)Balance of Trade	"	-5968	-6721	-9586	-9354	-6570	-8004	-7731	-10640
8.Index of Production:									
i) Agricultural	@	135.3	154.6	158.4	152.5	151.3	183.2*	186.4*	
ii)Industrial 1980-81=100		100.0	130.7	142.1	155.1	166.4	180.9	196.4	212.9
9.Wholesale Price Index:	81-82=100		120.1	125.4	132.7	143.6	154.3	165.7	182.7
10.Consumer Price Index:									
i)Industrial Workers	1960=100	401	582	620	674	736	838	887	991
ii)Agricultural Labourers	1960-61=100	395	537	546	572	629	721	759	858
iii)Urban Non-manual Workers	1960=100	369	532	568	613	668	745	793	899
11.Employment:									
i)Organised Sector:									
a) Public Sector	Million	15.48	17.27	17.68	18.03	18.32	18.52*	N.A.	N.A.
b) Private Sector	,,	7.40	7.31	7.37	7.36	7.39	7.47*	N.A.	N.A.
TOTAL:	,,	22.88	24.58	25.05	25.39	25.71	25.99*	N.A.	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	34.69++
12.Energy Generation (Gross)									
Coal	Mn. Tonnes	113.91	147.41	154.20	165.77	179.72	194.60	200.89	211.73
Lignite	,,	5.11	7.80	8.05	9.43	11.16	12.40	12.80	11.76
Natural Gas	(Mn.Cubic Metres)	2358	7241	8134	9853	11467	13217	16983	17998
Crude Oil	Mn.Tonnes	10.5	29.0	30.2	30.5	30.4	32.0	34.08	33.02
Petroleum Products	,,	25.35	35.27	42.37	45.37	47.25	48.49	51.37	51.28
13.Electricity:									
I)Utilities:									
Hydel	B.kwh.	46.5	53.9	51.0	53.8	47.5	57.9	62.1	71.6
Thermal	,,	61.3	98.8	114.4	128.9	149.6	157.7	178.7	186.4
Nuclear	,,	3.0	4.1	5.0	5.0	5.0	5.8	4.6	6.2
TOTAL	,,	110.8	156.9	170.4	187.7	202.1	221.4	245.4	264.2
ii)Non-Utilities:	,,	8.4	12.3	13.0	13.6	16.9	19.9	24.1	24.1
GRAND TOTAL:	,,	119.3	169.2	183.4	201.3	219.0	241.3	269.5	288.3

SOURCE: (1) RGI 's Ist March estimates. (2) Economic Survey 1990-91(3) Foreign Trade Statistics of India (1937-88 to 90-91) (4) = Selected Economic Indicators, Ministry of Industry.

N.A. = Not Available.

@ = Triennium ending 1969-70=100

@@ = As at end of March. * = Provisional

+ = Gold is valued at Rs. 53.58 per 10 gms upto May 1966 and at Rs. 84.39 per 10 gms upto September 1990 and and closer to international market price w.e.f. Oct. 17, 1990.

** Include Foreign assets of the Reserve Bank of India and Govt. balances held abroad upto 1955-56.

++ As on 31st December 1990.

Selected Economic Indicators of the Indian Economy.

Indicator	Unit/ Base	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90(P)	1990-91(P)
1.	2.	3.	4.	5.	6.	7.	8.	9.
1.Reserves@ (Balance recoverable)								
i)Crude Oil	Mn.Tonnes	366	500	558	581	638	726	739
ii)Natural Gas	Bn.Cub Mtrs.	352	479	497	541	579	648	686
2.Consumption:								
i)Crude Oil (in terms of refinery crude throughput)	Mn.Tonnes	25.84	42.91	45.7	47.75	48.8	51.94	51.77
ii)Petroleum Products (excl. RBF)	,,	30.90	40.87	43.66	46.42	50.09	54.10	55.04
3.Production:								
i)Crude Oil	,,	10.51	30.17	30.48	30.36	32.04	34.09	33.02
ii)POL Products	,,	24.12	39.88	42.76	44.73	45.70	48.69	48.57
4.Imports & Exports:								
(a)Gross Imports	Mn.Tonnes							
i)Qty.:Crude Oil	,,	16.25	15.15	15.48	17.73	17.81	19.49	20.70
POL Products	,,	7.29	3.86	3.04	4.15	6.50	6.56	8.66
TOTAL - (i)	,,	23.54	19.01	18.52	21.88	24.31	26.05	29.36
ii)Value: Crude Oil	Rs/Crores	3349	3687	2120	2986	2861	4089	6118
POL Products	,,	1917	1274	653	1024	1560	2255	4660
TOTAL- (ii)	,,	5266	4961	2773	4010	4421	6344	10778
(b)Exports:								
i)Qty.:Crude Oil	Mn.Tonnes	--	0.53	--	--	--	--	--
POL Products	,,	0.04	1.96	2.49	3.41	2.30	2.59	2.65
TOTAL- (i)	,,	0.04	2.49	2.49	3.41	2.30	2.59	2.65
ii)Value :Crude Oil	Rs/Crores	--	135	--	--	--	--	--
POL Products	,,	8	510	411	649	524	696	1004
TOTAL-(ii)	,,	8	645	411	649	524	696	1004
(c)Net Imports:								
i)Qty.:Crude Oil	Mn.Tonnes	16.25	14.62	15.48	17.73	17.81	19.49	20.70
POL Products	,,	7.25	1.90	0.55	0.74	4.20	3.97	6.01
TOTAL-(i)	,,	23.50	16.52	16.03	18.47	22.01	23.46	26.71
ii)Value.:Crude Oil	Rs/Crores	3349	3552	2120	2986	2861	4089	6118
POL Products	,,	1909	764	242	375	1036	1559	3656
TOTAL-(ii)	,,	5258	4316	2362	3361	3897	5648	9774
(d)Unit value of crude oil imports (Gross)	Rs/MT	2061	2435	1370	1684	1606	2098	2956
5.India's Total Exports	Rs/Crores	6711	10895	12452	15674	20231	27681	32553
6.POL Imports as percentage of India's total exports								
i)Gross Imports	%	78.5	45.5	22.3	25.6	21.9	22.9	33.1
ii)Net Imports	%	78.3	39.6	19.0	21.4	19.3	20.4	30.0
7.Contribution of Oil Sector to Centre/State Resources								
i)Royalty from Crude Oil	Rs/Crores	41	379	1091	570	602	656	2037
ii)Royalty from Gas	,,	3	22	46	78	101	120	138
iii)Oil Development Cess	,,	60	866	989	1513	2014	2914	2782
iv)Excise & Custom duties	,,	1512	2886	3165	4419	4879	5311	6922
v)Sales Tax	,,	628	1564	1888	1871	2107	2824	3653
vi)Generation of internal resources	,,	359	2358	2792	2199	3126	4524	N.A.
vii)Corporate Tax	,,	76	740	792	797	763	764	646
8.Natural Gas:								
i)Gross Production	Mn.Cu.Metres	2358	8134	9853	11467	13217	16983	17998
ii)Utilisation	,,	1522	4950	7072	7968	9250	11167	12766

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

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was commissioned in Barauni refinery; Motor Spirit, which is lead free was manufactured in BRPL for the first time; two tanks of 20,000 KL for North Gujarat Crude service were commssioned in Gujarat refinery; two new MS tanks with a capacity of 10,000 KLS each and LPG tank wagon degassing facility were commissioned in Mathura refinery; and RT fuel despatch facility through tank wagon and second Barge Jetty for loading FO/HSD/LOBS were installed at Haldia refinery.

During 1990-91 the marketing activities have also been expanded. Exporting of 3,100 tonnes of Benzene earning foreign exchange amounting to approx. U.S $ 1 million, exporting about 23,600 tonnes of Low Aromatic Naphtha (LAN) and 30,000 tonnes of Furnace Oil by BPCL, adding of additional tankage of 2,500 KL at Imphal and commissioning of a grassroot road-fed depot with 5981 KL tankage and Taluka Kerosene depot in Meghalaya by AOD, Digboi; completion of LPG Bottling Plant at Gorakhpur with a capacity of 5,000 tonnes per year by HPCL ; commissioning of Aviation Fuel Station at Kulu (Himachal Pradesh) and construction of new depot at Gangtok (Bhutan) with tankage of 1,534 KL and allied facilities, introducing Drug Reducer in the Haldia-Barauni Product pipeline, commissioning of Indane Bottling plant at Vijayawada with 10,000 MTPA capacity and at Varanasi with 15,000 MTPA capacity by IOC; commissioning of two mobile labs by IBP for quality control checks and launching of IBP brand of lubricants on an All India basis are some important events on the marketing side.

The oil companies opened 282 new retail outlets, 129 new SKO/LDO dealerships and 165 new LPG dealerships during the year 1990-91.

About 7.51 lakhs new LPG consumers were enrolled during the year. With this the number of domestic consumers increased to over 169.85 lakhs at the end of the year 1990-91.

II. CHRONOLOGY OF IMPORTANT EVENTS IN THE INDIAN PETROLEUM INDUSTRY DURING 1990-91

A. EXPLORATION AND PRODUCTION

1. Oil India Limited, Duliajan, Assam

1990 During the month of May, Oil flowed from an Eocene Sandstone reservoir of well NHK- 438, the first exploratory well drilled on the Dikom structure heralding discovery of a new oil field.

In October,. Polymer Mud was introduced in drilling wells for the first time in Assam in Talap-2. This minimised Down-Hole problems and resulted in excellent Bore Hole stability in this deep exploratory well. Also a Bench Scale Pilot plant installed in R&D centre at Duliajan for extraction of Oil from Assam Coal and Oil Shale.

1991 In January, the first computerised Mud Logging unit was commissioned.

In February, Cluster drilling started at HJN-11 in Hapjan Oil Field in Upper Assam and Hapjan-Nagajan Crude Oil pipeline was commissioned.

In March, Hapjan-Nagajan gas line was commissioned, seismic survey operation started in Western Uttar Pradesh. Marine geophysical survey work started in Saurashtra offshore PEL (Petroleum Exploration Licence) in Arabian sea and deepest well (TALAP-2) drilled in Assam reaching total depth of 5,001 MTRS.

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

1990 In April, Palej structure in WRBC (Western Regional Business Centre) was put on production and new structures were taken up for drilling at six places, three in Bombay offshore and three in Cauvery project. New ONGC owned Sagar Uday (Offshore rig) commissioned in Bombay offshore. Oil was struck at Mori structure in Krishna Godavari Basin (Onshore) and gas was struck in Kharotar structure in Rajasthan.

In May, 8 inch gas pipeline from Dahej EPS to Gandhar EPS (Early Production System) commissioned resulting in reduction of gas flaring by 25000 M^3 /day. A 2x3MW gas based captive power plant commissioned at Geleki in Assam. Three new structures taken up for drilling one at Saharanpur in U.P and two in Bombay Offshore. Gas was struck in GS-38 structure in Krishna-Godavari Offshore.

In June, ICG process platform commissioned in Bombay offshore for increasing gas utilisation by about 1.5 million cubic metres/day. Heara-Uran trunk pipeline was also commissioned. Eight new structures taken up for drilling in various parts of the country. ONGC owned BHEL rig E-1400-20 commissioned in Cauvery project. Gas was struck in Elamanchilli structure in Krishna-Godavari Basin (onshore).

In July, 18 inch Trunk Oil Pipeline from intermediate valve platform Dholka to CTF (Central Tank Facility) Nawagam and Dahej-Gandhar EPS Pipeline were commissioned in Gujarat. New 120 tonne BHEL work over rig commissioned in Tripura project. One new structure PND-1 taken up for drilling in Cauvery offshore. ONGC owned Cardwell rig IPS-M-700-9 commissioned in Ahmedabad project.

In August, successfully tested sand bearing object in well No. C-2-8 using sand screen for the first time avoiding costly gravel pack completion. New structure south Patan in Mehsana project put on production through EPS. ONGC owned Cardwel rig IPS-M-700-8 commissioned in Ankleshwar project. Gas was struck at B-149 structure in Bombay offshore.

In September, seven new structures were taken up for drilling, Kadmaha in Bihar, Neduncheri and Attikadai in Cauvery and B-40, B-183 & R-25 in Bombay offshore. Gas was struck at Bhakri Tibba structure in Rajasthan.

In October, structure failure analysis laboratory successfully commissioned at Institute of Engineering and Ocean Technology (IEOT) at Panvel. Drilling of first well in Vietnam's Southern Offshore commenced under the Indo-Vietnam production sharing contract. Six new structures taken up for drilling, two in western region, two in Southern region and two in Bombay offshore. Gas was struck in Manepalli structure in Krishna-Godavari Basin (Onshore).

In November, boat landing was installed at HT platform in Heera field and Oil flow commenced from 6 wells of this platform. 20 inch ICP-WIS Pipe laying completed and Riser Installation at WIS was also completed. Nine new structures taken up for drilling in Langwala in Rajasthan, Icchapur in West Bengal, MB-1 in Cauvery offshore and B-23, B-157, B-107, B-126, 75 A & B-192 in Bombay offshore. ONGC owned Cardwell rig IPS-M-700-10 commissioned in Ankleshwar Project. Gas struck in two structures B-163 and B-183 in Bombay offshore and Bankia structure in Rajasthan.

In December, production commenced from new field Mukta in Bombay offshore and four wells of Mukta field put on production. Nine new structures taken up for drilling in various parts of the country. Oil was struck at R-15A structure in Bombay offshore.

1991 In January, for the first time in SRBC (Southern Regional Business Centre), artificial lift installed successfully at well Narimanam-18 in Cauvery basin and in ERBC, field trial of Oil soluble demulsifier carried out reducing the load in ETP and simultaneously improving quality of Oil. Production restarted from Isolated Pool Indrora-1 in Ahmedabad Project. Well SA#5 in Bombay High put on production contributing 2,500 BOPD. Seven new structures taken up for drilling in various parts of the country. New ONGC owned BHEL rig M-750-2 in Mehsana project commissioned. Oil and Gas was struck in three structures in Bombay offshore.

In February, seven wells put on HPGL system in ERBC (Eastern Regional Business Centre). Three wells put on production in Bombay offshore. Seven new structures taken up for drilling at Sattarwali in Rajasthan, Gurza and Tanku in Krishna-Godavari, Adamburi in Cauvery, R-14A & B-18 in Bombay offshore, GS-22A in KG offshore and Py-4 in Cauvery offshore. New ONGC owned BHEL rig E-2000-6 in Assam commissioned. Oil and Gas was struck at two structures in Bombay offshore.

In March, highest ever average daily production of LPG (1705 tonnes) achieved during the month at Uran LPG plant. Oil Pipe line from Changmaigaon to Geleki GGS-III in Assam commissioned. Eight new structures taken up for drilling in different parts of the country. New ONGC owned BHEL rig M-450-1 in Mehsana project commissioned. Oil and Gas was struck at Endamuru structure in Krishna Godavari Basin (onshore).

3.ONGC Videsh Limited (ONGC overseas) New Delhi.

1990 The first exploratory well viz 06-A-IX of phase-I of Vietnam PSC is spudded.

1991 In the month of March, first exploratory well spudded on 06-10-90 is abandoned and the second exploratory well Viz 06-D-IX of Phase-1 of Vietnam PSC is spudded.

4. Gas Authority of India Ltd. New Delhi .

1990 In September, Spurline-III, pipeline was laid in order to supply gas to M/S Samtel colours and other industries in Ghaziabad region.

1991 In February, LPG plant phase-I, Vijaipur (M.P) was commissioned. This plant has installed capacity of 0.203 million tonnes per annum of LPG.

B. Refining.

1. Bharat Petroleum Corporation Ltd., Bombay.

1990 In August, BPCL refinery won the "Nehru Centenary Award" for Energy conservation in refineries, having achieved the best improvement in energy conservation in 1989-90 as compared to the performance of the last five years.

A Memorandum of understanding was also signed for the first time between BPCL and the Ministry of Petroleum for the year 1990-91.

2. Bongaigaon Refinery & Petrochemicals Ltd, Assam.

1990 For the first time Motor Spirit was manufactured in this refinery since September 90 by blending high Octane Return Naphtha Stream from Petrochemicals units with Naphtha from refinery units. This Motor spirit is lead free (i.e. without addition of TEL).

3. Cochin Refineries Ltd, Cochin.

1990 In April, CRL has been awarded the 1989 National Safety Award by the British Safety Council in recognition of the year long effort on the part of management and the shop floor to maintain a high standard of safety.

In May, Kerala State Pollution Control Board Award for effecting the best pollution control measures among the heavy organic industries in Kerala for the year 1989 has been awarded to CRL.

In June, CRL received the FACT "M.K.K. Nayar Memorial Productivity Award" for best performance and productivity among large industries for the year 1988-89 from Kerala state productivity council.

In July, Ministry's approval for entering into an agreement with M/S Chevron for foreign collaboration for the 5000 tonnes Polybutene project utilising raw material (feed stock) from CRL has been received.

In August, a landmark in technology modernisation was achieved by CRL when the operation of the FCC Unit was linked to Distributed Digital Control System (DIDC). With this, CRL became the first Indian refinery to fully convert all the process plant controls to DIDC system.

In October, "Safety Systems Audit" of CRL was conducted by an accredited auditor of British Safety Council and CRL was accorded a "Four star Grading" for having achieved excellent safety performance standards and practices.

1991 During the month of February, CRL processed for the first time the Australian Crude, "Challis". The refinery is also selected for the "Safety Award 1991" by the National Safety Council, Kerala chapter, from among chemical industries for achieving the lowest weighted average frequency rate of accidents for the three consecutive years previous to the award year.

INDIAN PETROLEUM & NATURAL GAS STATISTICS

1990-91

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

5. Indian Oil Corporation Ltd.

(a) Refineries

(i) Assam Oil Division, Digboi (Assam).

1990 Digboi refinery turned out a Crude throughput of 5,65,483 MT during 1990-91 achieving a capacity utilisation of 113.1%.

In May, approval for Wax Hydrofinishing Unit which will eliminate the present acid/clay treatment of wax, was received.

In November, one 320 KVA of "KOEL" (Kirloskar) DG set was installed and commissioned to augment captive power generation and meet the requirement of refinery operation.

In December, installation of two Nos. of DG sets of SKODA make of 1600 KVA commenced and good progress achieved. This will meet the power requirement of refinery operation adequately till the time new gas turbine based power station comes.

1991 In March, one portable air compressor of Ingersoll-Rand make of 12.75 m^3 /min. capacity was installed and commissioned to augment the service air supply.

(ii) Barauni Refinery, Barauni, Bihar.

1990 In June, Heat Exchanger Train Optimisation (HETO) project completed in AVU-II and Bio Treater project for meeting MINAS standard for liquid effluent commissioned.

In July, production of narrow cut MTO started. In December, Heat Exchanger Train Optimisation (HETO) project completed in AVU-I.

(iii) Gujarat Refinery, Koyali, Gujarat.

1990 During the year, 2 Tanks of 20,000 KL for North Gujarat Crude services commissioned. Additional LSHS loading capacity established in white oil gantry (Gantry No. 3) by converting FO Header to LSHS. Filling of 19 Kg. LPG cylinders for industrial use also started.

(iv) Haldia Refinery, Haldia, West Bengal.

1990 Low cost SDU revamp for augmenting LOBS production from 136 thousand tonnes to 162 thousand tonnes completed. The refinery received the British Safety Council award for the year 1989 in recognition and commendation of services rendered in the cause of safety. RT fuel despatch facility through tank wagon and Second Barge Jetty for loading FO/HSD/LOBS were commissioned.

(V) Mathura Refinery, Mathura, U.P.

1990 Two new MS tanks with a capacity of 10,000 KLs each were commissioned.

1991 LPG Tank wagon degassing facility and second 50 MT weigh Bridge for LPG Tank Truck were commissioned.

(b) Pipelines Division

1990 In May, Ambala station of MJPL received an all time record monthly delivery of 113.1 Th. Mt.

In August, feasibility report of new product pipeline from North-East to Barauni was approved by Board and forwarded to Govt. Government approval received for the KBPL project. The estimated Govt.cost of the project is Rs. 917.55 crores, including Foreign Exchange components of Rs. 204.54 crores. Jallandhar station of MJPL received an all time monthly record delivery of 140.4 Th.Mt.

In September, Drag Reducer injection in HBPL started from Haldia on regular basis.

In October, KAPL bagged the coveted " AWARD OF HONOUR" from National Safety Council, Chicago, USA for best safety record among Petroleum pipelines for the fifth year in succession for the year ending 1989. Quality circle inaugurated for the first time in pipelines in MJPL.

In November, HMRB Pipeline won the "INTERNATIONAL SAFETY AWARD" from British Safety Council, London, U.K. for the year 1989.

1991 Proposal for debottlenecking of KAPL approved by the Board in January.

In March, KAPL again qualified for "National Safety Award" from British Safety Council London, U.K. for the year 1990 for the services rendered in the cause of safety. Mainline diversion for GSPL TOP at Betkutchi successfully completed.

Pipelines have achieved record pumping of 20.896 MMT against the MOU target of 19.180 MMT during 1990-91.

6. Madras Refineries Limited, Tamil Nadu.

1990 In May, MRL signed two agreements for the supply of feed stock to the U.B. Petro Products Ltd. & Manali Petro Chemicals Ltd. A Sophisticated Distributed Digital control system in Refinery-I is commissioned.

In June, special pipeline to MRL from Tondiarpet Oil Terminal was commissioned for supply of Narimanam Crude.

In July, MRL commenced supply of propylene to Manali Petrochemicals Ltd. and to UB Petro Products in Manali.

In August, MRL signed a Memorandum of understanding (MOU) with the Union Ministry of Petroleum. Approval for the Rs. 164 crore Lube Expansion projects of MRL was received from the Govt. of India.

1991 In January, MRL received Govt. of India's sanction for the Rs. 115 crore Cauvery Basin Distillation project.

In February, MRL signed MOU with Tamilnadu Water Supply and Drainage Board (TWAD) for the supply of 1.5 MGD of water to MRL'S Cauvery Basin Crude Disttilation Unit (CBCDU) Nagapattinam.

C. Marketing

1. Bharat Petroleum Corporation Ltd., Bombay.

1990 In April, New Railway siding at LPG Bottling plant at Piyala (Near Delhi) was commissioned to receive the first LPG rake from Bombay.

In July, 3100 tonnes of Benzene was exported during the month, earning Foreign Exchange amounting to approx U.S.$ 1 million.

In December, for the first time BPCL exported about 23,600 tonnes of Low Aromatic Naphtha (LAN).

1991 In January, BPCL exported about 30,000 Tonnes of Furnace Oil.

In March, the refinery was given an award for the best performance in "Minimum Steam Leaks" amongst all refineries in India for the year 1990-91 by the Centre for High Technology (CHT).

2. HINDUSTAN PETROLEUM CORPORATION LTD. BOMBAY

In the fiscal year 1990-91, sales volume was an all time high at 10.58 million tonnes registering an increase of 2.2% over the previous year.

In October 1990, LPG Bottling plant at Gorakhpur with a capacity of 5,000 tonnes per year was completed and with this the corporation's Bottling capacity has reached an all time high of 0.746 million tonnes per annum.

3. IBP Company Limited.

The second and final phase of "New Supply Arrangements" was completed during the year. A Memorandum of Understanding was signed with IOC on 15-3-91 for hospitality and related matters on POL distribution. Two mobile labs were also commissioned for quality control cheeks at ROs. IBP brand of lubricants on an All India basis was launched during the year. Process of evaluating offers for technology for Bitumen Emulsion plant was undertaken.

4. Indian Oil Corporation Limited

(a) Indian Oil Corporation Limited, Bombay.

1990 In April, 85th Aviation Fuel Station commissioned at Kulu (Himachal Pradesh). LPG Equipment Research Centre of Oil Industry and second Mobile Lab based at Banglore were inaugurated during the month. Refuelling facility provided to Vintage Air Rally Aircrafts (London-Sydney) at Nagpur. Hydrant refuelling facilities commissioned at Dabolim Airport.

In May, 42nd Divisional office at Trivandrum commissioned and Aviation Fuel station facilities at Arkonam completed.

In June, agreement signed with Nepal Oil Corporation for the supply of Petroleum Products w.e.f. Ist July 1990 for a period of five years. Agreement also signed for rendering assistance in Aviation fuel handling and maintaining Aviation Fuel Station in Nepal.

60 units of Indian Oil won British Safety Council Awards for 1990, which include 24 storage terminals, 9 bulk storage depots, 9 Aviation Fuel Stations and 18 LPG Bottling Plants. 86th Aviation Fuel facilities started at Car Nicobar and Aviation fuel refuelling begun for "Air Tanzania" in India.

In August, agreement signed with M/S Petco, Malaysia for supply of crude Oil and export of Straight Run Naphtha. In September, POL Products to the tune of 25,477 Kls moved to Leh/Kargil for winter stocking, an all time record. New depot constructed at Gangtok (Bhutan) with tankage of 1,534 KL and allied facilities. Pumping capcity increased by 30% by introducing Drag Reducer in the Haldia-Barauni Product Pipeline.

In October, Indane Bottling Plant at Vijayawada commissioned with 10,000 MTPA capacity.

In November, LPG distributorship for Army Supply Core at Bombay was commissioned. Tenth Antarctica Expedition supplied full requirement of Petroleum Products. Sabarmati Terminal (Gujarat) won National Safety Council Award of USA for the period 1986-89.

In December, Bunkering facilities completed at Karwar Port. Indane Bottling Plant at "Salem" won the prestigious "Award of Honour" from National Safety Council of USA.

1991 In February, MOU signed with M/S Haldia Petro-chemical Ltd. for supply of Naphtha for the proposed Petro-chemical project.

In March, Servo 2T KH High Tech Lube Oil for Kinetic Honda launched. Indane bottling plant of 25,000 MTPA commissioned at Varanasi and MOU signed with Nepal Oil Corporation & Castrol for Marine Lubes.

b) Assam Oil Division, Digboi (Assam)

Retail outlet commissioning, SKO/LDO dealership commissioning and enrolment of LPG customers of AOD during 1990-91 were 100%, 112.5% and 100% respectively of the target.

Additional tankage of 2,500 KL at Imphal was added. A grassroot road-fed depot with 5981 KL tankage, the first POL depot in Meghalaya at Barapani and the first TKD (Taluka Kerosene Depot) in Meghalaya were commissioned during the year 1990-91. The product evacuation from Digboi/Tinsukia was 5,78,938 MT-the highest ever.

D. R & D Activities

1. Indian Institute of Petroleum, Dehradun.

1990 In April, an additional Caterpillor Engine Test Bench was set up with accessories as per the specification provided in the test methods.

In May, the know how on dealumination of Y-Zeolite was transferred to M/S Hindustan Lever Ltd, Bombay and the revamping and commissioning of the dewaxing plant of Haldia refinery based on IIP-EIL technology was carried out with the participation of IIP engineers. The revamping is expected to yield a benefit of Rs. 20 crore annually in terms of increased throughput and enhanced lube yield.

In July, IIP-EIL extraction technology for production of food grade hexane was accepted by HPCL, Bombay. EIL, the licensor, has been assigned the job of setting up of a 30,000 TPA.

In August, under alternative fuel project 15 DTC buses were converted to operate with 15-20% diesel replacement with ethanol. This was meant to conserve diesel fuel.

In November, first CSIR Technology Award 1989 was received by IIP for the development of IIP-EIL solvent extraction technology for production of aromatics.

Pilot plant runs were carried out at HPCL, Bombay to collect scale up data on food grade hexane production using a new solvent, NMP. Seven scientists from IIP participated from 18th October to 12th Nov. 1990.

In December, an agreement for development of ODBHC and PDBHC was signed with AEC. These are antioxidants widely used in polymers and plastics and have scope of utilisation in speciality lubricants for high temperature applications.

2. Indian Oil Corporation Limited

Research & Development Centre, Faridabad

1990-91 Formulations of 88 products in the categories of automotive oils, industrial oils, metal working Oils, greases and specialities were developed and issued during 1990-91. These include 16 new products. Field trials were also undertaken on 35 products with various users including the Railways, Defence Services, Steel Plants, Maruti Udyog, Kinetic Honda and others.

Engine builders approvals were obtained on 14 products. Important international approvals include those of Servoprime 32 from GEC Alsthom, U.K. and Servomarine C grades from MAN-B&W for their Alpha engines.

A climatic chamber with chassis dynamometer facility was commissioned which is capable of providing temperatures from - 30°C TO + 50°C and is also capable of simulating road conditions. This facility will be used for the evaluation of fuels and lubricants under simulated environmental conditions.

Two improved light efficient kerosene wick lamps with 35% fuel savings were developed.

Ten commercial FCC catalysts and additives were evaluated and predictions made on plant performance. Based on R&D's recommendations Mathura refinery has switched over to new catalyst resulting in improved yields.

E. LUBE PLANT

Lubrizol India Ltd.

1990 The viscosity Index Improver/Pour Point Depressants plant was commissioned in July.

1991 In February, the Dispersant Expansion Phase IV was commissioned. With this, the capacity of the Dispersant unit would stand enhanced to 15,000 MTPA.

III. INDIAN PETROLEUM INDUSTRY PROGRESS AT A GLANCE (1947-48 - 1990-91)

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 Exports	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	37%
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	469	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	470	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	526	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	69%
1986-87	558	497	30.48	9.8	45.70	42.76	43.66	15.48 (2120)	3.05 (953)	16.03	2362	1370	20096	12452	22.3%	3165	65%
1987-88	581	541	30.36	11.5	47.75	44.73	46.42	17.73 (2986)	4.15 (1024)	18.47	3362	1684	22244	15674	25.6%	4419	61%
1988-89	638	579	32.04	13.2	48.80	45.70	50.09	17.81 (2861)	6.50 (1560)	22.02	3897	1606	28235	20231	21.9%	4879	59%
1989-90	726	648	34.09	17.0	51.94	48.69	54.10	19.49 (4090)	6.56 (2255)	23.46	5648	2099	35412	27681	22.9%	5311	59%
1990-91 (P)	739	686	33.02	18.0	51.77	48.57	55.04	20.70 (6118)	8.66 (4660)	26.71	9775	2956	43193	32553	33.1%	6922	56%

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

IV. 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	1990-91*
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
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	51.8
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	33.0
(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	11.8
(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	21.2
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	20.7
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	20.7
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	55.0
(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	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	8.4
(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	21.1
(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	9.0
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	48.6
(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	4.7
(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	5.5
(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	17.2
(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	9.4
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	8.7
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	2.7
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	6.0

* 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	
	Production	Refineries 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
1990	33311	51671	48402	57943

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	3718.63	2106.33	5824.96	-	654.84	654.84	5170.12
1990(P)	5929.62	3541.64	9471.26	-	941.40	941.40	8529.86

(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	34087	51942	48690	56779
1990-91(P)	33021	51772	48567	57745

(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	652.69	2772.88	--	411.23	411.23	2361.66
1987-88	2986.31	1024.32	4010.63	--	648.75	648.75	3361.88
1988-89	2861.08	1559.84	4420.92	--	523.63	523.63	3897.29
1989-90(P)	4089.35	2254.71	6344.06	--	695.56	695.56	5648.50
1990-91(P)	6118.42	4660.21	10778.63	--	1003.92	1003.92	9774.71

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

VI. PETROLEUM ENERGY

PETROLEUM ENERGY IN INDIA 1982 - 1990 (Calendar Years)

PRODUCTS	1982	1984	1986	1988	1989	1990
1	2	3	4	5	6	7
A V A I L A B I L I T Y						
	IN ORIGINAL UNITS @ (MILLION TONNES)					
Kerosene	5.19	5.96	6.77	7.26	8.19	8.64
ATF	1.31	1.42	1.64	1.66	1.87	1.74
HSD	11.77	13.42	15.96	17.13	20.94	20.90
LDO	1.11	1.21	1.17	1.23	1.51	1.53
Fuel Oils	7.21	7.78	7.91	7.98	8.89	9.31
Others*	3.97	4.88	6.55	7.02	8.14	8.66
Total	30.56	34.67	40.00	42.28	49.54	50.78
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	10.38	11.92	13.54	14.52	16.38	17.28
ATF	2.62	2.84	3.28	3.32	3.74	3.48
HSD	23.54	26.84	31.92	34.26	41.88	41.80
LDO	2.22	2.42	2.34	2.46	3.02	3.06
Fuel Oils	14.42	15.56	15.82	15.96	17.78	18.62
Others*	7.94	9.76	13.10	14.04	16.28	17.32
Total	61.12	69.34	80.00	84.56	99.08	101.56
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	41.52	47.69	54.16	58.08	65.52	69.12
ATF	9.83	10.62	12.30	12.45	14.02	13.05
HSD	105.93	120.74	143.64	154.17	188.46	188.10
LDO	9.99	10.91	10.53	11.07	13.59	13.77
Fuel Oils	14.42	15.56	15.82	15.96	17.78	18.62
Others*	21.09	26.61	32.51	36.04	47.44	51.30
Total	202.78	232.13	268.96	287.77	346.81	353.96
C O N S U M P T I O N (#)						
PRODUCTS	1982	1984	1986	1988	1989	1990
1	2	3	4	5	6	7
	IN ORIGINAL UNITS (MILLION TONNES)					
Kerosene	5.13	5.84	6.52	7.59	8.09	8.42
ATF	1.13	1.30	1.59	1.69	1.75	1.73
HSD	11.64	13.31	15.70	18.40	20.33	21.18
LDO	1.05	1.18	1.15	1.38	1.49	1.51
Fuel Oils	7.13	7.79	8.02	8.32	8.70	9.10
Others*	3.84	4.93	6.47	7.32	8.23	8.68
Total	29.92	34.35	39.45	44.70	48.59	50.62
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @					
Kerosene	10.26	11.68	13.04	15.18	16.18	16.84
ATF	2.26	2.60	3.18	3.38	3.50	3.46
HSD	23.28	26.62	31.40	36.80	40.66	42.36
LDO	2.10	2.36	2.30	2.76	2.98	3.02
Fuel Oils	14.26	15.58	16.04	16.64	17.40	18.20
Others*	7.68	9.86	12.94	14.64	16.46	17.36
Total	59.84	68.70	78.90	89.40	97.18	101.24
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @					
Kerosene	41.04	46.72	52.16	60.72	64.72	67.36
ATF	8.48	9.75	11.93	12.68	13.13	12.98
HSD	104.76	119.79	141.30	165.60	182.97	190.62
LDO	9.45	10.62	10.35	12.42	13.41	13.59
Fuel Oils	14.26	15.58	16.04	16.64	17.40	18.20
Others*	20.44	26.38	34.95	38.06	48.08	51.45
Total	198.43	228.84	266.73	306.12	339.71	354.20

(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 1990-91. (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	1990-91(P)
1	2	3	4	5	6	7	8
	IN ORIGINAL UNITS (MILLION TONNES)						
Kerosene	5.27	5.93	6.76	7.29	7.95	8.30	8.81
ATF	1.38	1.41	1.64	1.74	1.79	1.84	1.83
HSD	12.34	13.59	16.13	17.54	19.00	20.79	21.87
LDO	1.12	1.25	1.16	1.26	1.47	1.54	1.51
Fuel Oils	7.29	7.89	7.91	7.86	9.31	9.17	9.43
Others*	4.13	5.15	6.59	7.14	7.82	8.26	8.73
Total	31.58	35.22	40.19	42.83	47.34	49.90	52.18
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @						
Kerosene	10.54	11.86	13.52	14.58	15.90	16.60	17.62
ATF	2.76	2.82	3.28	3.48	3.58	3.68	3.66
HSD	24.68	27.18	32.26	35.08	38.00	41.58	43.74
LDO	2.24	2.50	2.32	2.52	2.94	3.08	3.02
Fuel Oils	14.58	15.78	15.82	15.72	18.62	18.34	18.86
Others*	8.26	10.30	13.18	14.28	15.64	16.52	17.46
Total	63.06	70.44	80.38	85.66	94.68	99.80	104.36
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @						
Kerosene	42.16	47.44	54.08	58.32	63.60	66.40	70.48
ATF	10.35	10.58	12.30	13.05	13.43	13.80	13.72
HSD	111.06	122.31	145.17	157.86	171.00	187.11	196.83
LDO	10.08	11.25	10.44	11.34	13.23	13.86	13.59
Fuel Oils	14.58	15.78	15.82	15.72	18.62	18.34	18.86
Others*	21.99	27.95	33.11	36.86	40.35	48.33	51.79
Total	210.22	235.31	270.92	293.15	320.23	347.84	365.27
	C O N S U M P T I O N (#)						
PRODUCTS	1982-83	1984-85	1986-87	1987-88	1988-89	1989-90	1990-91
1	2	3	4	5	6	7	8
	IN MILLION TONNES UNITS (MILLION TONNES)						
Kerosene	5.21	5.96	6.65	7.23	7.73	7.38	8.42
ATF	1.15	1.34	1.60	1.65	1.71	1.78	1.68
HSD	12.01	13.70	16.01	17.66	18.80	20.69	21.14
LDO	1.07	1.20	1.16	1.24	1.44	1.46	1.50
Fuel Oils	7.30	7.94	8.05	8.14	8.46	8.64	8.99
Others*	4.08	5.07	6.62	7.14	7.80	8.42	8.67
Total	30.82	35.21	40.09	43.06	45.94	48.37	50.40
	IN MILLION TONNES OF COAL EQUIVALENT UNITS @						
Kerosene	10.42	11.92	13.30	14.46	15.46	14.76	16.84
ATF	2.30	2.68	3.20	3.30	3.42	3.56	3.36
HSD	24.02	27.40	32.02	35.32	37.60	41.38	42.28
LDO	2.14	2.40	2.32	2.48	2.88	2.92	3.00
Fuel Oils	14.60	15.88	16.10	16.28	16.92	17.28	17.98
Others*	8.16	10.14	13.24	14.28	15.60	16.84	17.34
Total	61.64	70.42	80.18	86.12	91.88	96.74	100.80
	IN MILLION TONNES OF COAL REPLACEMENT UNITS @						
Kerosene	41.68	47.67	53.20	57.84	61.84	59.04	67.36
ATF	8.63	10.02	12.00	12.38	12.83	13.35	12.60
HSD	108.09	123.26	144.09	158.94	169.20	186.21	190.26
LDO	9.63	10.78	10.44	11.16	12.96	13.14	13.50
Fuel Oils	14.60	15.88	16.10	16.28	16.92	17.28	17.98
Others*	21.61	27.82	38.02	39.85	40.56	43.78	51.33
Total	203.24	234.93	271.85	296.45	314.31	332.80	353.03

(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.

VII. EXPLORATION

AREA WISE DEPLOYMENT OF DEEP DRILLING RIGS, WELLS & METREAGE DRILLED BY ONGC & OIL FROM 1970-71 TO 1990-91.

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
1990-91*	108	369	777	32	139	276	140	508	1053
			(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
1990-91*	13	27	112	--	--	--	13	27	112
			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
1990-91*	121	396	889	32	139	276	153	535	1165

* = Provisional.

EXPLORATORY & DEVELOPMENT DRILLING 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)
			A. 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
1990-91*	176	434	220	455	396	889
			B. 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
1990-91*	73	184	66	92	139	276
			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+13P	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
1990-91*	249	618	286	547	535	1165

(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
1991	227	1	305	-	6	462	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
1991	362	59	70	51	44	161	747
			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
1991	2873	330	1281	274	235	94	5087
				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
1991	3462	390	1656	325	285	717	6835

Note: 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 IN ONGC/OIL SINCE INCEPTION UPTO MARCH, 1991.

(Provisional)

	STATE	Detailed mapping (Sq.Km.)	Semi - detailed mapping (Sq.Km)	Traver- sing (Line/Kms)	Reconna- issance (Sq.Km)	Special Studies (Sq.Km)	Geotec- tonic studies (Sq.Km)	Reconnato- ry Trave- rsing (Sq.Km)
	1	2	3	4	5	6	7	8
1.	Andhra Pradesh	-	5017	-	5295	-	45000	-
2.	Tamil Nadu	2860	6955	271	11160	GC 595	-	-
3.	Assam (including Meghalaya, Nagaland Mizoram, Tripura, Arunachal Pradesh, Manipur & Nefa)	8005	48974	11440	4979	CW 740 Photo-1100 geolo logical	-	167
4.	Gujarat	9529	25505	1624	25628	-	-	-
5.	Madhya Pradesh.	-	26891	-	-	-	-	-
6.	Bihar	-	5445	93	-	-	-	-
7.	Himachal Pradesh & Punjab.	9710	16079	4915	4568	1489	-	330 200 (RM)
8.	Jammu & Kashmir	1764	11527	1923	6548	70 + CH 372	-	-
9.	Uttar Pradesh	4658	12731	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	-	2736	95	270	-	-	-
16.	Maharashtra	-	1240	-	-	-	-	-
	TOTAL :	42049	245394	26393	81799	5729 +CW 740 + Photo-1100 geological +GC 595 +CH 372	50400	497 200 (RM)

Abbreviations: RM-Road Mapping, CW-Compilation Works.
CH-Checking lines. GC-Ground Checking.

STATE-WISE ACHIEVEMENT OF GEOPHYSICAL FIELD PARTIES BY ONGC/OIL SINCE INCEPTION UPTO MARCH 1991.

(Provisional)

S.No	STATE	DEPARTMENTAL			CONTRACT		
		Line Kms.	SSKm 3-D	SLK	Line Kms.	SLK	S.Km. 3-D
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	7108	-	38810	3838	-	-
2.	Assam (including Tripura Mizoram, Arunachal Pradesh, Meghalaya & Nagaland)	14707	173	39833	250	-	-
3.	Gujarat	43202	608	90663	9903	-	-
4.	Bihar	2426	-	3574	-	-	-
5.	Haryana	-	-	1536	-	-	-
6.	Himachal Pradesh & Punjab.	5400	-	2027	-	549	-
7.	Tamil Nadu	9639	273	29204	8014	-	-
8.	Jammu & Kashmir	1937	-	-	99	-	-
9.	Orissa	1644	-	-	-	-	-
10.	Uttar Pradesh	12190	-	23763	-	-	-
11.	Rajasthan	3554	-	25884	4105	-	-
12.	West Bengal	16051	-	15328	2946	-	44
13.	Madhya Pradesh	73	-	2102	-	-	-
	TOTAL ONSHORE	117931	1054	272724	29155	549	44
	OFFSHORE	264027	-	-	149085	-	-
	TOTAL	381958	1054	272724	178240	549	44

SLK: Standard Line Kilometres.

STATE-WISE ACHIEVEMENT OF DRILLING BY ONGC/OIL SINCE INCEPTION UPTO MARCH 1991.

S.No	STATE	Drilling achievement since inception			
		DEPARTMENTAL		CONTRACT	
		Wells (Nso.)	Metreage ('000')	Wells (Nos.)	Metreage ('000')
1	2	3	4	5	6
A.	ONSHORE :				
1.	Andhra Pradesh (Including Kerala)	82	290.61	-	-
2.	Assam, Andaman & Nicobar (including Tripura, Mizoram, Meghalaya, West Bengal and Nagaland)	930	2986.82	-	-
3.	Gujarat (including Kutch, Maharashtra and Madhya Pradesh)	2801	4592.66	-	-
4.	Bihar	4	23.22	1	4.90
5.	Himachal Pradesh (including Punjab)	11	39.69	2	9.50
6.	Tamil Nadu & Pondicherry	115	305.08	-	-
7.	Jammu & Kashmir	4	12.02	-	-
8.	Orissa	-	-	-	-
9.	Uttar Pradesh	4	12.80	1	5.26
10.	Rajasthan	35	65.59	6	11.41
	TOTAL ONSHORE	3986	8328.49	10	31.07
B.	OFFSHORE :				
1.	West Coast	977	2209.66	-	-
2.	East Coast	114	363.00	-	-
	TOTAL OFFSHORE	1091	2572.66	-	-
	TOTAL (A+B)	5077	10901.15	10	31.07

VIII. CRUDE OIL
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	161.69	144.97*	-	306.66	432.14	738.80
1991	158.26	156.22*	-	314.48	491.67	806.15

@ Proved & Indicated Balance Recoverable Reserves.
* Includes crude oil reserves in Nagaland, Tamil nadu & Andhra Pradesh

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
1990		2697	9294	11991	21320	33311	415767

(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
1990-91*		2649	9181	11830	21191	33021	424231

* 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
1990*	41	311	5199	6440	11991	21320	33311
			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
1990-91*	43	313	5076	6398	11830	21191	33021

* Provisional.

IX. State-wise Reserves of Natural Gas @

(Bn. Cubic Metres)

YEAR	ON SHORE				OFF SHORE	Grand Total
	Gujarat	Assam	Rajasthan	Total	Bombay High	
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
1991	93.39	151.68*	1.22	246.29	483.50	729.79

@ Proved & Indicated Balance Recoverable Reserves.

* Includes Natural Gas Reserves in Tripura, Nagaland, Tamil Nadu, Arunachal Pradesh & Andhra Pradesh.

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
	Arunachal Pradesh	Assam	Tripura/ T.Nadu	Gujarat	Total	Bombay High	
1	2	3	4	5	6	7	8
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	1	1903	-	760	2664	3104	5768
1984	1	2027	-	758	2786	4034	6820
1985	4	2049	-	884	2937	4971	7908
1986	12	2105	17	980	3114	6350	9464
1987	13	2149	33	940	3135	7771	10906
1988	17	2150	53	1183	3403	9381	12784
1989	21	2172	77	1559	3829	12097	15926
1990*	27	2014	158	1645	3844	14146	17990
			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	Neg.	1954	-	748	2702	3259	5961
1984-85	2	2056	-	775	2833	4408	7241
1985-86	6	2029	-	919	2954	5180	8134
1986-87	13	2142	22	971	3148	6705	9853
1987-88	13	2147	43	1005	3208	8259	11467
1988-89	18	2160	50	1258	3486	9731	13217
1989-90	23	2159	101	1613	3896	13087	16983
1990-91*	29	2011	180	1696	3916	14082	17998

* = 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
		ONSHORE		
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
1990-91*	1696	-	402	2194
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	2283**	96	740	1447
1990-91*	2220**	102	681	1437

** :- 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	13087	-	4502	8585
1990-91*	14082	-	4047	10035
		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	16983	96	5720	11167
1990-91*	17998	102	5130	12766

* Provisional

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	1447	2582	8585	11167
1990-91*	1294	1437**	2731	10035	12766

* = Provisional.

**= Includes Arunachal Pradesh, Tripura & Tamil Nadu.

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*	1823	526	87	42	1329	3807	5334	21	88	5443	9250
1989-90*	2140	695	78	41	1521	4475	6578	29	85	6692	11167
1990-91*	2211	1178	71	47	1778	5285	7345	38	98	7481	12766

Neg. = Negligible
* = Provisional

X. REFINING.

Petroleum Refining Capacity in India as on 1.4 1991

(Million Tonnes Per Annum)

Refinery	Year of Commissioning	Installed Capacity as on 1.4.1991	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	5.50*		
4. HPCL, Visakh	1957	4.50		
5. IOC, Guwahati	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. BR & PL, Assam	1979	1.35		
	TOTAL:	51.85		
B. Refineries Under Expansion				
1. IOC, Digboi		0.50	0.65	These projects are still in the various stages of approval/ Implementation.
2. IOC, Guwahati		0.85	1.00	
3. IOC, Barauni		3.30	3.80	
4. IOC, Koyali		9.50	12.50	
5. CRL, Cochin		4.50	7.00-7.50	
6. MRL, Madras		5.60	6.50	
7. BR & PL, Assam		1.35	2.35	
C. Projects Under Advance Stage of consideration				
1. Karnal			6.00	8th Plan
2. HPCL, (Mangalore)			3.00	
3. Assam (Numaligarh)			3.00	

*Includes 2 MTPA of Swing Refinery Capacity available at HPCL, Bombay

REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS 1961 TO 1990

('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	51974	-	51974	48724	-	48724
1990(P)	51671	-	51671	48402	-	48402

(P) = Provisional

REFINERY CRUDE THROUGHPUT AND PRODUCTION OF PETROLEUM PRODUCTS 1961-62 TO 1990-91

('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	51942	-	51942	48690	-	48690
1990-91(P)	51772	-	51772	48567	-	48567

(P) = Provisional

REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION OF POL PRODUCTS 1965-66 - 1990-91*

('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
1990-91*:						
Total Production	549	6603	5507	3230	712	2208
Crude Run	566	6957	5766	3464	783	2417

*Provisional.

Contd...

REFINERY-WISE CRUDE RUN AND TOTAL PRODUCTION OF POL PRODUCTS 1965-66 - 1990-91*

('000' Tonnes)

YEAR	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
1990-91*:							
Total Production	8786	2607	7416	4714	5279	956	48567
Crude Run	9334	2835	7808	5005	5698	1139	51772

* Provisional.

TRENDS IN DOMESTIC PRODUCTION OF PETROLEUM PRODUCTS DURING THE PERIOD 1980-81 TO 1990-91.

(Qty. '000'Tonnes)

Products	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.Light Distillates of which :	4101	5138	5313	6134	6315	8253	9069	9245	9451	10021	9813
LPG*	366	410	406	514	596	867	995	1026	1034	1179	1222
Mogas	1519	1614	1797	1937	2144	2306	2515	2662	2822	3328	3545
Naphtha	2115	3004	2986	3578	3470	4955	5437	5462	5378	5227	4658
2. Middle Distillates of which	12115	14134	15625	16873	17226	21613	23324	24563	25362	26867	26552
Kerosene	2396	2907	3393	3528	3364	4030	4912	5104	5201	5700	5472
ATF	1001	1009	1137	1195	1297	1519	1553	1695	1753	1575	1801
HSD	7371	9042	9761	10862	11086	14624	15450	16296	16656	17737	17186
LDO	1108	949	1121	1081	1253	1177	1172	1259	1468	1540	1509
3. Heavy Ends of which	7907	8910	10135	9919	9694	10015	10368	10870	10886	11802	12202
F.O.	4041	4015	4829	4588	4095	3791	3865	4563	4243	4543	4878
LSHS/HHS/RFO	2079	2893	3135	3412	3791	4164	4146	3903	4614	4409	4549
Total Fuel Oils	6120	6908	7964	8000	7886	7955	8011	8466	8857	8952	9427
Lube Oils	426	407	434	470	414	501	491	478	497	547	561
Bitumen	1082	1298	1397	1069	944	1107	1224	1370	1548	1671	1603
Petroleum Coke	86	141	149	136	181	192	264	257	275	275	238
Paraffin wax											49
Other Waxes											46
TOTAL PRODUCTION :	24123	28182	31073	32926	33236	39881	42761	44728	45699	48690	48567
Crude Throughput	25836	30146	33156	35263	35556	42910	45699	47754	48803	51942	51772
LPG Production from Natural Gas	-	73	169	223	277	363	494	558	726	769	922
NGL PRODN.	-	-	25	50	58	83	186	264	414	589	606

(P) - Provisional

* - Excludes LPG production from Natural Gas.

PRODUCTION OF PETROLEUM PRODUCTS-1984 TO 1990

('000' Tonnes)

PRODUCT	PRODUCTION						% Variation	
	1984	1986	1987	1988	1989	1990 (P)	1989 1988	1990 1989
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				a) From Crude Oil:				
1. Light Distillates:	6226	8859	9318	9285	10086	9846	+ 8.6	- 2.4
of which								
L.P. Gas	583	963	1021	1010	1163	1215	+15.1	+ 4.5
Mogas	2062	2464	2789	2700	3242	3536	+20.1	+ 9.1
Naphtha	3479	5300	5574	5361	5422	4730	+ 1.1	-12.8
SBPS/Hexane	28	40	48	74	85	122	+14.9	+43.5
2. Middle Distillates:	17003	22825	24332	24951	26949	26503	+ 8.0	- 1.7
of which								
Kerosene	3304	4735	5113	5116	5507	5686	+ 7.6	+ 3.3
ATF/Jet A-1	1332	1510	1647	1756	1654	1649	- 5.8	- 0.3
H.S.D.	10954	15166	16106	16399	17979	17121	+ 9.6	- 4.8
L.D.O.	1197	1176	1242	1424	1512	1525	+ 6.2	+ 0.9
J.B.O.	50	70	63	61	77	80	+26.2	+ 3.9
M.T.O.	105	104	110	110	130	136	+18.2	+ 4.6
3. Heavy Ends:	9734	10193	10933	10494	11689	12053	+11.4	+ 3.1
of which								
F.O.	4296	3738	4659	4155	4491	4856	+ 8.1	+ 8.1
LSHS/HHS/RFO	3618	4190	3957	3689	4395	4454	+19.1	+ 1.3
Total Fuel Oils	7914	7928	8616	7844	8886	9310	+13.3	+ 4.8
Lube Oils	455	478	507	577	556	548	- 3.6	- 1.4
Bitumen	919	1247	1351	1556	1595	1598	+ 2.5	+ 0.2
Pet. Coke*	174	249	267	272	277	246	+ 1.8	-11.2
Paraffin wax						49	-	-
Other waxes						44	-	-
Total waxes	66	84	75	85	95	93	+11.8	- 2.1
4. Total Production	32963	41877	44583	44730	48724	48402	+ 8.9	- 0.7
5. Crude Run	35265	44940	47445	48803	51974	51671	+ 6.5	- 0.6
			(b) From Natural Gas:					
6. L.P.G.	261	465	542	706	764	860	+44.4	+12.6
7. N.G.L.		173	236	386	518	621	+34.2	+19.9

* Includes Calcined pet. Coke

PATTERN OF REFINERY PRODUCTION

(Percentages)

PRODUCTS	1984	1986	1987	1988	1989	1990 (P)
Light Distillates @	17.7	19.7	19.6	19.0	19.4	19.1
Middle Distillates	48.3	50.8	51.3	51.1	51.8	51.3
Total Fuel Oils	22.4	17.6	18.2	16.1	17.1	18.0
Lubes	1.3	1.1	1.1	1.2	1.1	1.1
Bitumen	2.6	2.8	2.8	3.2	3.1	3.1
Others	1.2	1.2	1.0	1.0	1.2	1.1
Total Production	93.5	93.2	94.0	91.7	93.7	93.7
RBF & Losses/Inventories	6.5	6.8	6.0	8.3	6.3	6.3
Crude Run	100	100	100	100	100	100

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

PRODUCTION OF PETROLEUM PRODUCTS-1985-86 TO 1990-91(P)

('000' Tonnes)

PRODUCT	PRODUCTION						% Variation	
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91 (P)	1989-90 1988-89	1990-91 1989-90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			a) From Crude Oil:					
1. Light Distillates:	8253	9069	9245	9451	10021	9813	+ 6.0	- 2.1
of which								
L.P. Gas	867	995	1026	1034	1179	1222	+14.0	+ 3.6
Mogas	2306	2515	2662	2822	3328	3545	+17.9	+ 6.5
Naphtha	4955	5437	5462	5378	5227	4658	- 2.8	-10.9
SBPS/Hexane	31	32	74	72	96	125	+33.3	+30.2
2. Middle Distillates:	21613	23324	24563	25362	26867	26552	+ 5.9	- 1.2
of which								
Kerosene	4030	4912	5104	5201	5700	5472	+ 9.6	- 4.0
ATF/Jet A-1	1519	1553	1695	1753	1575	1801	-10.2	+14.3
H.S.D.	14624	15450	16296	16656	17737	17186	+ 6.5	- 3.1
L.D.O.	1177	1172	1259	1468	1540	1509	+ 4.9	- 2.0
J.B.O.	91	67	63	72	74	82	+ 2.8	+10.8
M.T.O.	106	105	109	115	128	146	+11.3	+14.1
3. Heavy Ends:	10015	10368	10870	10886	11802	12202	+ 8.4	+ 3.4
of which								
F.O.	3791	3865	4563	4243	4543	4878	+ 7.1	+ 7.4
LSHS/HHS/RFO	4164	4146	3903	3928	4409	4549	+12.2	+ 3.2
Total Fuel Oils	7955	8011	8466	8171	8952	9427	+ 9.6	+ 5.3
Lube Oils	501	491	478	497	547	561	+10.1	+ 2.6
Bitumen	1107	1224	1370	1548	1671	1603	+ 7.9	- 4.1
Pet. Coke*	192	264	257	275	275	238	0.0	-13.5
Paraffin wax						49	-	-
Other waxes						46	-	-
Total waxes	81	79	75	88	95	95	+ 8.0	0.0
4. Total Production	39881	42761	44728	45699	48690	48567	+ 6.5	- 0.3
5. Crude Run	42910	45699	47754	48803	51942	51772	+ 6.4	- 0.3
			(b) From Natural Gas:					
6. L.P.G.	363	494	558	726	769	922	+ 5.9	+19.9
7. N.G.L.	83	186	264	414	589	606	+42.3	+ 2.9

(P) Provisional. * Includes Calcined pet. Coke

PATTERN OF REFINERY PRODUCTION

(Percentages)

PRODUCTS	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91(P)
Light Distillates @	19.2	19.9	19.4	19.4	19.3	19.0
Middle Distillates	50.4	51.0	51.4	52.0	51.7	51.3
Total Fuel Oils	18.5	17.5	17.7	16.7	17.2	18.2
Lubes	1.2	1.1	1.0	1.0	1.1	1.1
Bitumen	2.6	2.7	2.9	3.2	3.2	3.1
Others	1.0	1.4	1.3	1.3	1.2	1.1
Total Production	92.9	93.6	93.7	93.6	93.7	93.8
RBF & Losses/Inventories	7.1	6.4	6.3	6.4	6.3	6.2
Crude Run	100	100	100	100	100	100

@ = Includes gases. (P) = Provisional.

XI. 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	55801	+ 8.8	1989-90	56779	+ 7.4
1990(P)	57943	+ 3.8	1990-91(P)	57745	+ 1.7

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 1990-91(P)

('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	1990 -91 (P)	% age share of the Total
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. LIGHT DISTILLATES:	2697	3596	4388	5187	5420	5600	6318	6776	7412	7547	8619	9412	9801	17.0
of which: LPG	176	336	405	492	601	746	953	1241	1497	1686	1962	2268	2415	4.2
Mogas	1453	1275	1522	1599	1722	1891	2084	2275	2505	2810	3052	3491	3545	6.1
Naphtha	904	1836	2325	2963	2958	2804	3125	3106	3249	2852	3364	3350	3446	6.0
2. MIDDLE DISTILLATES:	9040	11653	17056	17919	19660	20651	22429	23948	25656	28005	29955	32484	33106	57.3
of which: Kerosene	3283	3104	4228	4693	5214	5524	5959	6229	6645	7231	7731	8239	8423	14.6
ATF/Jet A-1	689	897	1125	1128	1145	1208	1336	1453	1603	1654	1713	1775	1677	2.9
HSD	3837	6595	10345	10832	12013	12600	13696	14886	16009	17657	18795	20706	21139	36.6
LDO	1092	878	1122	1036	1067	1097	1198	1123	1156	1245	1437	1486	1506	2.6
3. HEAVY ENDS :	6175	7198	9452	9417	9577	9590	10048	10148	10594	10864	11518	12199	12128	21.0
FO/TDO	3513	4279	5406	4306	4208	4207	4256	3806	3793	4191	4605	4490	4462	7.7
LSHS/HHS	1151	1502	2067	2878	3093	3351	3688	4094	4254	3953	3851	4330	4524	7.8
Total Fuel Oils	4664	5781	7473	7184	7301	7558	7944	7900	8047	8144	8456	8820	8986	15.6
Lube Oils	523	425	570	567	577	590	634	658	721	756	811	888	857	1.5
Greases	22	16	23	25	28	27	30	42	34	35	36	38	35	0.1
Lubes & Greases (Total)	545	441	593	592	605	617	664	700	755	791	847	926	892	1.5
Bitumen	777	690	1064	1292	1379	1050	935	1126	1309	1379	1498	1695	1581	2.7
Petroleum Coke	107	151	137	174	103	114	234	163	208	246	316	383	290	0.5
Paraffin wax													70	0.1
Other waxes													47	0.1
Other Misc.	82	135	185	175	189	251	271	259	275	304	401	375	262	0.5
Total (1+2+3)	17912	22447	30896	32523	34657	35841	38795	40872	43662	46416	50092	54095	55035	95.3
Refinery Fuel	1223	1226	1365	1584	1738	1935	2033	2491	2612	2522	2790	2684	2710	4.7
GRAND TOTAL	19135	23673	32261	34107	36395	37776	40828	43363	46274	48938	52882	56779	57745	100.0

P = Provisional.

PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1985 TO 1990 (P)

(Qty. '000' Tonnes)

PRODUCT	1985	1986	1987	1988	1989	1990 (P)	% age change 1990/1989
1.	2.	3.	4.	5.	6.	7.	8.
1. Light Distillates:	6683	7213	7415	8286	9259	9750	5.3
L.P.Gas	1175	1431	1629	1887	2181	2396	9.9
Mogas	2247	2428	2735	2974	3370	3583	6.3
Naphtha	3107	3194	2875	3258	3421	3397	(-)0.7
SBP/Haxane	54	62	65	75	105	127	21.0
Others	100	98	111	92	181	247	36.5
2. Middle Distillates:	21855	23714	25208	27318	31926	33201	4.0
Kerosene	6168	6522	7088	7595	8089	8423	4.1
ATF/Jet A-1	1431	1588	1627	1691	1752	1734	(-)1.0
HSD	14713	15703	17165	18325	20329	21176	4.2
LDO/MDO	1145	1149	1220	1379	1491	1512	1.4
JBO	81	75	62	65	74	83	12.2
MTO	100	101	103	107	118	133	12.7
Others	76	70	53	54	73	140	91.8
3. Heavy ends:	10186	10456	10811	11352	11938	12286	2.9
F.O./TDO	3933	3761	4024	4696	4353	4672	7.3
LSHS/HHS	4022	4255	4126	3664	4347	4424	1.8
Fuel Oils (total)	7955	8016	8150	8360	8700	9096	4.6
Lubes & Greases	696	736	794	832	884	904	2.3
Bitumen/Asphalt	1103	1216	1357	1512	1597	1609	0.8
Pet.Coke	180	199	212	280	369	309	(-)16.3
Wax	75	86	78	84	110	120	9.1
Others	177	203	222	284	278	248	(-)10.8
Total (1+2+3)	40583	42877	45544	48854	53123	55237	4.0
Refinery Fuel@	2390	2606	2504	2454	2678	2706	1.0
GRAND TOTAL:	42973	45483	48048	51308	55801	57943	3.8

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

PRODUCT-WISE SALES/CONSUMPTION OF PETROLEUM PRODUCTS DURING THE YEARS 1985-86 TO 1990-91 (P)

(Qty. '000' Tonnes)

PRODUCT	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91 (P)	% age Change 1990-91/ 1989-90
1.	2.	3.	4.	5.	6.	7.	8.
1.Light Distillates:	6776	7412	7547	8619	9412	9801	4.1
L.P.Gas	1241	1497	1686	1962	2268	2415	6.5
Mogas	2275	2505	2810	3052	3491	3545	1.5
Naphtha	3106	3249	2852	3364	3350	3446	2.9
SBP/Haxane	54	64	66	86	112	134	19.6
Others	100	97	128	155	191	261	36.6
2.Middle Distillates:	23948	25656	28005	29955	32484	33106	1.9
Kerosene	6229	6645	7231	7731	8239	8423	2.2
ATF/Jet A-1	1453	1603	1654	1713	1775	1677	(-)5.5
HSD	14886	16009	17657	18795	20706	21139	2.1
LDO/MDO	1123	1156	1245	1437	1486	1506	1.3
JBO	85	70	62	72	77	82	6.5
MTO	100	102	104	110	118	140	18.6
Others	72	71	52	97	83	139	67.5
3.Heavy Ends:	10148	10594	10864	11518	12199	12128	(-)0.6
F.O./TDO	3806	3793	4191	4605	4490	4462	(-)0.6
LSHS/HHS	4094	4254	3953	3851	4330	4524	4.5
Fuel Oils (total)	7900	8047	8144	8456	8820	8986	1.9
Lubes & Greases	700	755	791	847	926	892	(-)3.7
Bitumen/Asphalt	1126	1309	1379	1498	1695	1581	(-)6.7
Pet.Coke	163	208	246	316	383	290	(-)24.3
Wax	76	82	81	106	116	117	0.9
Others	183	193	223	295	259	262	1.2
Total (1+2+3)	40872	43662	46416	50092	54095	55035	1.7
Refinery Fuel@	2491	2612	2522	2790	2684	2710	1.0
GRAND TOTAL:	43363	46274	48938	52882	56779	57745	1.7

@ = 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. 1960-61 TO 1990-91(P)

(Qty.'000' Tonnes)

YEAR		I.O.C.	B.Shell/ BPCL	Esso/ HPCL	Caltex/@ HPCL(VMU)	IBP	Others	TOTAL
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	S/C	30997	10183	10346		2206	363	54095
	%	57.3	18.8	19.1		4.1	0.7	100
1990-91(P)	S/C	31426	10377	10576		2284	372	55035
	%	57.1	18.9	19.2		4.1	0.7	100

S/C = Sales / Consumption E = Estimated
P = Provisional. @ = Included under ESSO/HPCL from 1980-81 onwards.
Source : M16 for the year 1990-91

Deliveries* made to International/Coastal Bunkers during the years 1980-81 TO 1990-91

(Qty.'000' Tonnes)

ITEMS	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91(P)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Shipping International Bunkers:											
F.O.	148.7	67.1	85.0	104.4	154.9	64.3	110.2	165.1	101.9	143.2	107.6
H.S.D.	15.4	16.8	14.5	17.0	12.4	10.1	6.4	12.0	7.2	8.6	10.7
L.D.O.	50.4	52.3	41.7	42.3	36.6	31.5	33.7	44.7	38.6	36.0	32.2
TOTAL	214.5	136.2	141.2	199.7	203.9	105.9	150.3	221.8	147.7	187.8	150.5
Coastal Bunkers:											
F.O.	128.9	149.6	172.2	142.0	143.2	167.7	197.6	200.0	200.0	208.4	208.0
H.S.D.	42.0	61.4	81.0	86.3	86.7	98.3	134.0	140.0	134.3	120.7	129.5
L.D.O.	32.4	36.8	47.8	47.1	49.0	39.9	35.6	32.6	38.3	38.0	34.2
TOTAL	204.3	247.8	301.0	275.4	278.9	305.9	367.2	372.6	372.6	367.1	371.7
Total Bunkers:											
F.O.	277.6	216.7	257.2	282.4	298.1	232.0	307.8	365.1	301.9	351.6	315.6
H.S.D.	58.4	78.2	95.5	103.3	99.1	108.4	140.4	152.0	141.5	129.3	140.2
L.D.O.	82.8	89.1	89.5	89.4	85.6	71.4	69.3	77.3	76.9	74.0	66.4
TOTAL	418.8	384.0	442.2	475.1	482.8	411.8	517.5	594.4	520.3	554.9	522.2

* = Excluding Sales to foreign bunkers on KNPC account by IOC.
Source : M6 report of OCC.
P = Provisional.

STATE-WISE CONSUMPTION OF MAJOR PETROLEUM PRODUCTS: 1990-91(Prov.)
(Including International Bunkers)

('000' Tonnes)

State/Union Territory	NAPHTHA	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	78	181	217	576	43	1719	41	197	98	189	3339
2. Arunachal Pradesh	--	1	7	11	2	36	Neg	--	--	9	66
3. Assam	21	35	57	259	55	334	8	96	45	119	1029
4. Bihar	105	62	140	469	5	1237	183	335	131	188	2855
5. Goa	238	13	22	31	20	106	5	34	79	68	616
6. Gujarat	599	215	277	777	36	1329	251	306	1485	424	5699
7. Haryana	--	73	106	152	21	797	43	263	172	74	1701
8. Himachal Pradesh	--	9	20	36	Neg	103	2	4	3	9	186
9. Jammu & Kashmir	--	16	29	81	11	126	8	3	1	16	291
10. Karnataka	140	109	219	439	50	1053	21	220	98	111	2460
11. Kerala	185	81	148	262	25	690	11	181	154	174	1911
12. Madhya Pradesh	--	115	165	385	20	1229	25	244	100	180	2463
13. Maharashtra	585	496	581	1495	615	2615	337	792	1317	613	9446
14. Manipur	--	4	11	21	1	21	--	--	--	5	63
15. Meghalaya	--	3	14	16	--	65	Neg	--	--	4	102
16. Mizoram	--	2	6	9	--	17	--	Neg	--	6	40
17. Nagaland	--	2	12	10	--	19	Neg	Neg	--	10	53
18. Orissa	108	20	54	156	13	426	23	194	51	80	1125
19. Punjab	49	92	212	325	58	1197	35	365	231	131	2695
20. Rajasthan	180	78	127	273	41	1171	22	137	106	129	2264
21. Sikkim	--	1	3	5	Neg	4	Neg	2	--	--	15
22. Tamil Nadu	461	204	238	656	50	2006	58	610	220	311	4814
23. Tripura	--	2	7	20	3	29	--	Neg	--	5	66
24. Uttar Pradesh	548	247	337	917	65	2651	142	124	148	369	5548
25. West Bengal	74	125	150	752	110	1253	210	265	63	423	3425
TOTAL (A)	3371	2186	3159	8133	1244	20233	1425	4372	4502	3647	52272
B. UNION TERRITORIES											
1. Andaman & Nikobar	--	Neg	2	4	3	39	Neg	1	--	2	51
2. Chandigarh	--	15	26	25	22	32	2	3	4	31	160
3. Dadra & Nagar Haveli	--	1	2	5	--	8	4	Neg	--	1	21
4. Daman & Diu	--	Neg	1	5	--	4	Neg	1	--	2	13
5. Delhi	75	205	344	232	407	732	66	77	18	126	2282
6. Lakshadweep	--	Neg	--	Neg	--	4	--	Neg	--	--	4
7. Pondicherry	--	7	9	15	--	73	4	6	--	5	119
TOTAL (B)	75	228	384	286	432	892	76	88	22	167	2650
C. OUTSIDE TERRITORIES											
Bhutan	--	1	2	5	1	14	Neg	2	--	4	29
Total (C)	--	1	2	5	1	14	Neg	2	--	4	29
D. ADJUSTMENT/(+/-)	--	--	--	-1	--	--	--	--	--	+85	+84
GRAND TOTAL (A+B+C+D)	3446	2415	3545	8423	1677	21139	1501	4462	4524	3903	55035

Note : Minor oil companies consumption data has been shown in the Adjustment.
Source : MS report.

Estimated State-wise per capita Sales/Consumption of POL Products

(Kgs.)

State/ Territory	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91(P)
A.STATES							
Andhra Pradesh	33.3	38.8	40.0	42.4	46.5	51.1	50.4
Arunachal Pradesh							76.9
Assam	26.6	33.7	35.4	37.7	40.5	42.9	46.2
Bihar	20.5	26.1	28.5	30.0	33.0	33.2	33.1
Goa							527.1
Gujarat	114.6	127.8	133.0	134.6	139.1	137.4	138.4
Haryana	64.7	80.0	88.2	94.4	86.5	99.3	104.2
Himachal Pradesh	19.9	24.7	27.0	31.5	35.0	37.1	36.4
Jammu & Kashmir	27.7	33.1	37.3	41.1	42.1	41.4	37.7
Karnataka	34.1	42.6	47.0	47.5	51.4	52.7	54.9
Kerala	44.9	48.5	52.0	54.9	60.3	60.6	65.9
Madhya Pradesh	21.6	31.7	32.8	35.0	38.3	39.7	37.2
Maharashtra	92.4	101.2	101.5	106.3	117.4	121.4	120.0
Manipur	29.2	30.6	32.7	35.7	41.7	38.1	34.5
Meghalaya	20.2	40.9	42.4	43.5	53.4	57.4	57.9
Mizoram							58.3
Nagaland	28.4	40.4	40.4	44.1	53.9	49.1	43.6
Orissa	20.5	26.5	27.5	30.4	33.2	35.1	35.7
Punjab	84.0	96.5	113.8	126.8	115.5	128.3	133.5
Rajasthan	31.8	39.4	42.1	43.2	55.9	56.4	51.6
Sikkim	36.7	38.9	33.3	26.2	38.1	30.2	37.2
Tamil Nadu	66.8	72.8	74.7	77.1	85.2	88.2	86.5
Tripura	13.1	18.8	20.6	23.5	27.2	30.4	24.0
Uttar Pradesh	23.1	31.8	34.8	35.9	39.7	41.7	40.0
West Bengal	39.8	45.1	45.9	47.6	51.2	52.5	50.4
B.OTHER AREAS							
Chandigarh	209.3	226.9	246.8	250.8	275.4	261.1	249.7
Delhi	187.6	214.9	216.6	229.9	236.0	257.1	243.5
Goa.(incl.Daman & Diu Dadra & Ngr.Haveli)	290.6	368.0	393.4	400.7	719.7	438.4	141.7*
Others	52.0	69.5	79.1	83.5	92.9	114.5	155.5
TOTAL ALL-INDIA @	48.2	55.9	59.7	62.0	63.7	69.1	68.4

Estimated per capita consumption of selected petroleum products - 1980-81 to 1990-91 (incl. Bunkers).

(Kgs)

PRODUCT	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91(P)
Naphtha	3.5	4.2	4.2	3.6	4.3	4.1	4.1
M.S.	2.3	3.0	3.2	3.6	3.9	4.2	4.2
SKO	6.3	8.3	8.6	9.1	9.8	10.0	10.0
HSDO	15.5	19.7	20.6	22.3	23.8	25.2	25.0
LDO	1.7	1.5	1.5	1.6	1.8	1.8	1.8
F.O. (Regular)	8.1	5.0	4.9	5.3	5.8	5.5	5.3
LSHS/HHS	3.1	5.3	5.5	5.0	4.9	5.3	5.4
TOTAL ALL-INDIA @ SALES CONSUMPTION	48.2	57.3	59.3	62.0	63.7	69.1	68.4

Note: i) Based on Expert Committee's population projections as on Ist March each year and projections on 1971 and 1981 Census basis and Paper-1 of 1991, census of India-1991.

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.

* = Figure excluding Goa, Goa has been shown separately

P = Provisional

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF LPG NAPHTHA & HSDO DURING 1987-88 To 1990-91

(Qty.'000' Tonnes)

SECTOR	1987-88 Consum-ption	1987-88 % to Total	1988-89 Consum-ption	1988-89 % to total	1989-90 Consum-ption	1989-90 % to total	1990-91 Consum-ption	1990-91 % to total
1.	2.	3.	4.	5.	6.	7.	8.	9.
L. P. GAS:								
1. Domestic	1415	83.9	1592	81.2	1810	79.8	1894	78.4
2. Commercial/Industry	243	14.4	326	16.6	422	18.6	487	20.2
3. Others	28	1.7	44	2.2	36	1.6	34	1.4
TOTAL (1+2+3) :	1686	100.0	1962	100.0	2268	100.0	2415	100.0
NAPHTHA.								
1. Fertilizers	2064	72.4	2395	71.2	1835	54.8	1842	53.5
2. Petrochemicals	754	26.4	902	26.8	842	25.1	766	22.2
3. Others	34	1.2	67	2.0	673	20.1	838	24.3
TOTAL (1+2+3):	2852	100.0	3364	100.0	3350	100.0	3446	100.0
HSDO								
1. Transport								
i) Road Transport (major)					1936	9.3	1864	8.8
ii) Aviation					11	0.1	11	0.1
iii) Shipping	152	0.9	151	0.8	184	0.9	193	0.9
iv) Railways	1375	7.8	1447	7.7	1455	7.0	1453	6.9
v) Other Transport (incl.Agr.Retail Trade)	13833	78.3	15224	81.0	14755	71.3	15292	72.3
Sub-total : 1	15360	87.0	16822	89.5	18341	88.6	18813	89.0
2. Plantation/Food (incl. Processing)								
i) Sugar Mills	48	0.3	56	0.3	69	0.3	99	0.5
ii) Others (incl. Plan. of Food)	177	1.0	94	0.5	201	1.0	219	1.0
Sub-total : 2	225	1.3	150	0.8	270	1.3	318	1.5
3. Power Generation (utilities)	209	1.2	132	0.7	126	0.6	104	0.5
4. Industry								
i) Iron & Steel	57	0.3	56	0.3	63	0.3	69	0.3
ii) Textile & Fibre	243	1.4	188	1.0	201	1.0	173	0.8
iii) Cement	196	1.1	188	1.0	154	0.7	155	0.7
iv) Ceramic & Glass	20	0.1	19	0.1	27	0.1	26	0.1
v) Chemicals & Allied	73	0.4	94	0.5	115	0.6	77	0.4
vi) Aluminium	4	Neg	3	Neg	4	Neg	3	Neg
vii) Mining & quarrying	514	2.9	545	2.9	569	2.7	556	2.6
viii) Engg.(Mech & Elec)	165	0.9	150	0.8	159	0.8	160	0.8
ix) Fertilizers	26	0.2	19	0.1	17	0.1	13	0.1
x) Other Industries & Construction	154	0.9	38	0.2	203	1.0	199	1.0
Sub-total : 4	1452	8.2	1300	6.9	1512	7.3	1431	6.8
5. Misc.Services (incl. DGS&D)	411	2.3	391	2.1	457	2.2	473	2.2
Total (1+2+3+4+5)	17657	100.0	18795	100.0	20706	100.0	21139	100.0

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF LDO, FO(Regular) and LSHS/HHS DURING 1987-88 TO 1990-91.

(Qty.'000' Tonnes)

SECTOR	1987-88 Consum-ption	% to Total	1988-89 Consum-ption	% to Total	1989-90 Consum-ption	% to Total	1990-91(P) Consum-ption	% to Total
1.	2.	3.	4.	5.	6.	7.	8.	9.
			L.D.O.					
1. Transport								
i) Road Transport					2	0.1	1	0.1
ii) Aviation					1	0.1	1	0.1
iii) Shipping	77	6.2	78	5.4	76	5.1	67	4.5
iv) Railways	6	0.5	11	0.8	5	0.3	4	0.2
v) Other Transport (incl. Agr. Retail Trade)	18	1.4	7	0.5	14	0.9	13	0.9
Sub - Total : 1	101	8.1	96	6.7	98	6.5	86	5.8
2. Plantation/Food (incl. Processing)								
i) Sugar Mills	2	0.1	1	0.1	2	0.1	4	0.2
ii) Others (incl.Plan.& Food)	32	2.6	33	2.3	35	2.4	37	2.5
Sub - Total : 2	34	2.7	34	2.4	37	2.5	41	2.7
3. Power Generation (utilities)	251	20.2	346	24.1	325	22.0	282	18.8
4. Industry								
i) Iron & steel	36	2.9	43	3.0	45	3.0	51	3.4
ii) Textile & Fibre	28	2.3	40	2.8	39	2.6	44	2.9
iii) Cement	10	0.8	10	0.7	8	0.5	10	0.7
iv) Ceramic & Glass	41	3.3	47	3.3	49	3.3	51	3.4
v) Chemicals & Allied	91	7.3	119	8.3	110	7.4	129	8.6
vi) Aluminium	5	0.4	6	0.4	10	0.7	6	0.4
vii) Mining & quarrying	13	1.0	9	0.6	10	0.7	10	0.7
viii) Engg.(Mech & Elec)	115	9.2	109	7.6	112	7.6	128	8.5
ix) Fertilizers	6	0.5	7	0.5	7	0.5	6	0.4
x) Other Industries & Construction	173	13.9	214	14.9	187	12.7	203	13.5
Sub - Total . 4	518	41.6	604	42.0	577	39.0	638	42.5
5. Misc.Services (incl. DGS&D)	341	27.4	357	24.8	443	30.0	454	30.2
TOTAL : (1+2+3+4+5)	1245	100.0	1437	100.0	1480	100.0	1501	100.0
			F.O.(Regular)					
1. Transport								
i) Road Transport					9	0.2	45	1.0
ii) Aviation					3	0.1	4	0.1
iii) Shipping	365	8.7	281	6.1	346	7.7	300	6.7
iv) Railways	37	0.9	32	0.7	24	0.5	22	0.5
v) Other Transport (Incl. Agr. Retail Trade)	14	0.3	147	3.2	79	1.8	76	1.7
Sub - Total : 1	416	9.9	460	10.0	461	10.3	447	10.0
2. Plantation/Food (incl. Processing)								
i) Sugar Mills	11	0.3	14	0.3	14	0.3	14	0.3
ii) Others (incl.Plan.& Food)	130	3.1	152	3.3	147	3.3	122	2.8
Sub - Total : 2	141	3.4	166	3.6	161	3.6	136	3.1
3. Power Generation (utilities)	636	15.2	617	13.4	692	15.4	531	11.9

Contd...

ESTIMATED SECTOR-WISE (END-USE) INDUSTRY CONSUMPTION OF LDO, FO(Regular) and LSHS/HHS DURING 1987-88 TO 1990-91.

(Qty.'000' Tonnes)

SECTOR	1987-88 Consum-ption	1987-88 % to Total	1988-89 Consum-ption	1988-89 % to Total	1989-90 Consum-ption	1989-90 % to Total	1990-91(P) Consum-ption	1990-91(P) % to Total
1.	2.	3.	4.	5.	6.	7.	8.	9.
			F.O.(Regular) Contd..					
4. Industry								
i) Iron & steel	161	3.8	267	5.8	310	6.9	311	7.0
ii) Textile & Fibre	230	5.5	276	6.0	333	7.4	289	6.5
iii) Cement	40	1.0	46	1.0	51	1.1	64	1.5
iv) Ceramic & Glass	87	2.1	92	2.0	70	1.6	73	1.6
v) Chemicals & Allied	508	12.1	640	13.9	591	13.2	613	13.7
vi) Aluminium	74	1.8	101	2.2	8[illegible]	2.0	95	2.1
vii) Mining & quarrying	39	0.9	64	1.4	74	1.6	55	1.2
viii) Engg.(Mech & Elec)	151	3.6	152	3.3	151	3.4	146	3.3
ix) Fertilizers	979	23.3	1137	24.7	841	18.7	1058	23.7
x) Other Industries & Construction	485	11.6	417	9.0	468	10.4	446	10.0
Sub - Total : 4	2754	65.7	3192	69.3	2977	66.3	3150	70.6
5. Misc.Services (incl. DGS&D)	244	5.8	170	3.7	199	4.4	198	4.4
T O T A L : (1+2+3+4+5)	4191	100.0	4605	100.0	4490	100.0	4462	100.0
			LSHS/HHS					
1. Transport	2	0.1	4	0.1	8	0.2	13	0.3
2. Plantation/Food (incl. Processing)								
i) Sugar Mills	2	0.1	1	Neg	2	Neg	2	0.1
ii) Others (incl.Plan.& Food)	36	0.9	34	0.9	42	1.0	47	1.0
Sub - Total : 2	38	1.0	35	0.9	44	1.0	49	1.1
3. Power Generation (utilities)	1659	42.0	1571	40.8	1630	37.6	1835	40.6
4. Industry								
i) Iron & steel	198	5.0	189	4.9	181	4.2	174	3.8
ii) Textile & Fibre	212	5.4	177	4.6	237	5.5	332	7.3
iii) Cement	29	0.7	27	0.7	33	0.8	42	0.9
iv) Ceramic & Glass	104	2.6	89	2.3	113	2.6	136	3.0
v) Chemicals & Allied	579	14.7	504	1[illegible].1	395	9.1	360	8.0
vi) Aluminium	46	1.2	54	1.4	83	1.9	62	1.4
vii) Mining & quarrying	29	0.7	23	0.6	28	0.6	14	0.3
viii) Engg.(Mech & Elec)	31	0.8	23	0.6	29	0.7	40	0.9
ix) Fertilizers	871	22.1	951	24.7	1298	30.0	1184	26.2
x) Other Industries & Construction	139	3.5	196	5.1	232	5.4	261	5.8
Sub - Total : 4	2240	56.7	2233	58.0	2629	60.8	2605	57.6
5. Misc.Services (incl. DGS&D)	14	0.3	8	0.2	19	0.4	22	0.4
T O T A L : (1+2+3+4+5)	3953	100.0	3851	100.0	4330	100.0	4524	100.0

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	3610	1678814	465.0
1990-91(P)	3759	1703213	453.1

Source : Railway Board.

INDUSTRY/PLANT-WISE OFFTAKE OF NAPHTHA

(Qty.'000' Mts)

Category and Plant	1982-83	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91(P)
1	2	3	4	5	6	7	8
1. Fertilizer Plants:							
Madras Fertilizer Ltd.	207	209	234	105	205	196	200
HFC, Durgapur	66	88	94	95	55	41	74
FCI, Gorakhpur	94	95	98	88	108	98	22
HFC, Barauni	127	151	115	131	99	73	101
SFC, Kota	147	172	158	139	152	166	176
ICI, Kanpur	320	290	305	253	292	319	305
RFP, Rourkela	62	84	82	75	99	103	109
GSFC, Baroda	96	130	125	118	126	132	127
FACT, Cochin	113	95	123	105	138	112	128
ZAC, Goa	217	220	227	224	212	220	239
IFFCO, Phulpur	221	205	251	216	299	264	284
IFFCO, Kalol	54	42	46	49	47	44	55
MCFL, Manglore	124	127	162	103	151	111	139
SPIC, Tuticorin	263	260	270	234	269	270	261
EID Parry Ltd.Madras	4	-	-	--	--	--	--
GNFC, Bharuch	1	1	1	NEG.	NEG.	NEG.	1
FACT, Alwaye	54	62	65	61	76	61	56
FCI, Bombay	45	-	-	13	--	--	--
Coromandal Ferts.Vizag	66	84	73	66	66	64	72
NFL Nangal						16	49
DVC Maithan						0.0	5
Others	-	45	59	--	--	8	2
Sub-Total Fertilizer	2281	2360	2488	2075	2392	2298	2405
II. Petrochemical Plants:							
BRPL, Bongaigaon	-	3	-	24	16	25	22
HCC, Rasayani	4	4	4	4	4	--	--
IPCL, Baroda	372	406	444	451	455	417	422
NOCIL, Bombay	200	222	259	264	299	287	275
RCF, (Mathanol) Bombay	16	14	13	--	15	9	4
UCIL, Bombay	66	69	4	--	--	--	--
Rama Petro Chemicals	--	--	--	--	48	41	45
Reliance Ind.Ltd.	--	--	--	--	59	179	182
National Peroxide						2	6
Oswal Agro						19	65
Others	-	-	-	-	1	--	--
Sub-Total (Petro-Chem.)	658	718	724	743	897	979	1021
III. Others.							
HOC Rasayani	--	--	--	--	--	5	5
FCI Talchar	--	--	--	--	4	2	0.0
DESU	--	--	--	--	56	59	0.0
BSL, Bhilai etc.	19	28	37	34	11	2	0.0
HCL, Khetri	--	--	--	--	4	4	4
Sub-Total (others)	19	28	37	34	75	72	9
GRAND TOTAL: (I + II + III)	2958	3106	3249	2852	3364	3349	3435

Source: Industry Performance Review. P : Provisional

PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000' Tonnes)

Category and Plant	1988-89	1989-90	1990-91(P)
I.Power:			
A.Northern:			
OBRA Thermal	20.7	22.9	19.9
HSEB Hardwaganj	8.3	0.0	6.3
BTPS Bhadrapur	20.3	20.8	20.7
GNTP Bhatinda	11.2	16.5	2.8
TPS Paricha	4.5	6.4	6.5
TPS Singaroli	8.4	22.2	5.4
TPS Rihand	-	5.6	19.7
TPS Kota	-	51.9	5.6
DESU Delhi BPC	36.0	37.5	34.0
Faridabad	-	3.6	2.7
TPS Ropar	26.4	37.4	15.2
TPS Panipat	30.9	35.2	30.5
Sub-total (A)	166.7	260.0	169.3
B.Eastern:			
ASEB Chandrapura	40.4	73.3	65.5
CTPS Chadrapur	23.0	34.2	33.3
DTPS Durgapur	-	0.0	0.0
DPL Durgapur	1.5	0.0	0.0
NTPC Farrakka	11.3	0.0	0.0
BTPS Barauni	31.3	23.4	24.2
NTPC Kanti (Muzzafarpur)	4.0	0.0	0.0
TPS Patratu	8.0	0.0	0.0
TTPS Talcher	11.4	9.4	7.4
BTPS Salakati	-	28.2	21.6
Sub-Total (B)	130.9	168.5	152.0
C.Western:			
DPH Dhuwaran	710.8	750.2	756.2
GEB Ukai	29.6	6.9	16.6
GEB Gandhinagar	36.2	16.7	13.0
AECO Sabarmati	15.9	13.4	7.1
GEB Wanakbari	56.9	44.5	55.0
MPEB Sarani	87.0	139.1	107.5
MSEB Koradi	42.5	39.1	24.0
MSEB Chandrapur	24.6	18.7	14.8
MPEB Darri	16.9	11.3	13.5
MSEB Nasik	41.0	24.9	25.7
TPS Bhusawal	24.7	15.8	15.4
TPS Paras	1.8	2.2	2.2
MPEB Parli	22.1	52.1	31.8
NTPC Korba	50.6	33.0	21.1
MPEB Korba	29.3	22.2	18.8
GEB Kandla	6.7	-	-
TATA Thermal	543.0	554.4	707.1
MPEB Chachai	12.9	12.1	13.1
NTPC Waidhan	-	22.6	23.0
MSEB Khaparkheda	-	0.0	13.9
Sub-Total (C)	1752.5	1779.2	1879.8

Contd.....

PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000' Tonnes)

Category and Plant	1988-89	1989-90	1990-91(P)
D.Southern:			
TTPS Tuticorin	10.9	12.2	11.2
KTPS Polancha	7.1	11.2	5.1
RTPS Raichur	4.5	3.1	3.6
MTPS Mettur Dam	17.6	27.1	13.8
NTPC Ramagundam	23.3	34.7	28.0
ETPS Ennore	9.8	8.8	7.2
NLC Thermal	-	0.0	9.5
Sub-Total(D)	73.2	97.1	78.4
Total : Power(A+B+C+D)	2123.3	2304.8	2279.5
II Fertilizer Plants:			
A.Northern:			
NFL Nangal	270.6	287.1	294.1
NFL Bhatinda	260.4	302.0	248.0
NFL Panipat	277.2	301.2	315.7
IFFCO Phulpur	24.5	21.6	18.7
Sub-Total (A)	832.7	911.9	876.5
B.Eastern:			
HFC Holida	-	0.0	0.0
HFC Durgapur	10.2	8.3	19.2
FCI Sindri	204.9	193.0	205.2
HFC Barauni	10.5	25.5	26.2
FCI Talcher	8.8	8.7	11.4
Sub-Total (B)	234.4	235.5	262.0
C.Western:			
ZAC Goa	79.6	80.6	92.5
IFFCO Kalol	36.2	34.9	37.4
GSFC Baroda	71.1	78.4	115.9
GNFC Bharuch	408.4	438.2	414.9
Sub-Total (C)	595.3	632.1	660.7
D.Southern:			
MFL Madras	77.8	78.2	83.3
MCFL Mangalore	44.6	54.3	70.4
FACT Cochin	97.6	92.0	101.7
NLC Neyveli	100.1	108.6	71.9
SPIC Tuticorin	185.2	193.0	173.0
FCI Ramagundam	11.4	11.5	14.2
Coramandal Fert.	36.9	33.1	31.9
Sub-Total (D)	553.6	570.7	546.4
Total:Fertilizer (A+B+C+D)	2216.0	2350.2	2345.6

Contd.....

PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000 Tonnes)

Category and Plant	1988-89	1989-90	1990-91(P)
III Petrochemical Plants			
C.Western:			
IPCL Baroda	253.4	103.3	41.3
NOCIL Bombay	0.9	0.0	0.0
Reliance Industry,Bombay	22.5	154.2	167.5
Sub-Total (C)	276.8	257.5	208.8
D.Southern:			
FACT Udyogmandal	-	0.3	0.0
TNPL Madras	24.5	40.2	42.0
Mysore Petrochemicals	-	-	-
Sub-Total (D)	24.5	40.5	42.0
Total:Petrochemical(C+D)	301.3	298.0	250.8
IV Steel Plants			
B.Eastern:			
TISCO Burnapur	3.0	1.5	1.4
RSP Rourkela	84.1	85.7	69.6
DSP Durgapur	94.5	73.2	68.6
ASP Durgapur	17.0	22.5	24.0
PCBL Durgapur	-	-	-
TISCO Jamshedpur	64.2	59.8	54.8
BSP Bokaro	21.8	49.6	65.1
BASL Patratu	3.4	5.0	2.1
HCL Ghatsila	2.3	9.0	6.3
Sub-Total (B)	290.3	306.3	291.9
C.Western:			
HSL Bhillai	37.1	35.5	23.0
SAIL Bhillai	8.8	-	-
Sub-Total (C)	45.9	35.5	23.0
D.Southern:			
VISC Badravati	-	0.0	18.8
Sub-Total (D)	-	0.0	18.8
Total:Steel(B+C+D)	336.2	341.8	333.7
V. OTHERS			
A.Northern:			
Hindalco	23.6	17.2	28.3
Sub-Total (A)	23.6	17.2	28.3
B.Eastern:			
IRE Chatrapur	9.2	10.3	3.5
NELCO Damanjodi	11.4	77.2	50.5
OCL Rajgangapur	12.9	13.1	11.2
TELCO Jamshedpur	4.3	10.9	6.4
Sub-Total (B)	37.8	111.5	71.6

Contd.....

PLANT/CUSTOMER-WISE OFFTAKE OF FO/LSHS

(Qty. '000' Tonnes)

Category and Plant	1988-89	1989-90	1990-91(P)
C.Western:			
HOC Rasayani	11.8	12.0	15.2
Sub-Total (C)	11.8	12.0	15.2
D.Southern:			
HOC Cochin	17.3	12.9	8.9
Kudramukh Iron & Ore Company	0.4	47.6	44.3
Sub-Total (D)	17.7	60.5	53.2
Total:others(A+B+C+D)	90.9	201.2	168.3
VI General Trade			
A. Northern Region	528.6	529.9	555.9
B. Eastern Region	448.9	384.2	384.3
C. Western Region	1524.0	1465.0	1492.3
D. Southern Region	886.7	945.0	1034.6
Total:General Trade (A+B+C+D)	3388.2	3324.1	3467.1
GRAND TOTAL (I+II+III+IV+V+VI)	8455.9	8820.1	8845.0

P: Provisional

Source : Industry Performance Review.

Note : Separate figures for some of the plants like Reliance Industries, Patalganga etc. are not available.

STATE-WISE FUEL CONSUMPTION AND POWER GENERATION IN GAS TURBINE AND DIESEL POWER STATIONS IN INDIA DURING 1988-89.

(Provisional)

S T A T E/UT	Gas Station			Diesel Station		
	Natural Gas (Mn.cubic Metres)	Oil (KL)	Generation (GWH)	Diesel Oil (KL)	Generation (GWH)	Average Oil Consumption (Lts/KWH)
1.	2.	3.	4.	5.	6.	7.
Assam	252.09	-	442.65	-	-	-
Gujarat	8.44	-	1.07	40	0.06+1.56(w)	0.67
Himachal Pradesh	-	-	-	-	-	-
Manipur	-	-	-	517(E)	1.41	0.45
Nagaland	-	-	-	52	0.11	0.47
Sikkim	-	-	-	120	0.31	0.39
Tripura	26.24	-	38.05	700	2.00	0.35
West Bengal	-	28671	63.45	176	0.33	0.53
Maharashtra	623.60	517(E)	1922.88	-	-	-
Tamil Nadu	-	-	-	-	4.00(W)	-
UNION TERRITORIES:						
A & N Islands	-	-	-	11980	32.70	0.37
Arunachal Pradesh	-	-	-	1653	7.34	0.23
Chandigarh	-	-	-	-	-	-
Lakshadweep	-	-	-	2737	7.27	0.38
Delhi	-	73983***	208.53	-	-	-
Mizoram	-	-	-	6472(E)	19.20	0.34
Central Sector	18.74	-	62.96	-	-	-
All India Total	929.11	103171 *	2739.59	24447	70.73+ 5.56(W)	0.35

(E) = Estimated

(W) = Windmill generation

* : Includes HSD / Naphtha

*** = HSD / Napatha (Estimated).

SOURCE: Central Electricity Authority.

STATEWISE CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FROM THERMAL POWER STATIONS IN INDIA DURING 1988-89

State/UT	Consumption in Steam Power Station						Heat Input (K.Cal 9 x 10)	Gross Generation (GWH)	Average Heat Input (K.Cal/KWH
	Fuel Coal '000' (Tonnes)	Lignite '000' (Tonnes)	FO '000' (KL)	LDO/HSD '000' (KL)	LSHS/HHS '000' (KL)	Natural Gas (MCM)			
1	2	3	4	5	6	7	8	9	10
Andhra pradesh	5701	-	11	4+453*	-	-	21714.65	7263.37	2990
Assam	250	-	38	2	31	40.067	2389.01	643.32	3714
Bihar	3683	-	-	118	32	-	16701.62	4336.95	3851
Gujarat	8855	-	743	10	89	103.36	48184.08	16812.45	2866
Haryana	1734	-	48	7	-	-	8388.53	2244.78	3737
Karnataka	1620	-	5	1	-	-	5753.44	2437.48	2360
Madhya Pradesh	9570	-	147	28	4	-	34532.91	12192.55	2832
Maharashtra	14381	-	114	31+350*	542	530000MT(B)	69579.07	24331.39	2860
Orissa	1100	-	10	4	-	-	4686.63	1272.00	3684
Punjab	3308	-	47	3	-	-	13373.94	4803.45	2784
Rajasthan	884	-	23	6	-	-	3183.06	1287.01	2473
Tamil Nadu	5596	-	26	3	11	-	22290.64	7867.80	2833
Uttar Pradesh	10856	-	86	51	1(A)	-	40157.30	14144.20	2839
West Bengal	5332	-	87	10	-	-	21547.86	8254.13	2611
C.Govt. Project	21439	9271	193	14	11	-	105485.11	40221.35	10790
DVC	3966	-	96	-	-	-	19548.28	5670.09	3448
UNION TERRITORIES									
A & N Islands	-	-	-	-	-	-	-	-	-
Delhi	748	-	35	-	-	-	3765.47	1105.40	3406
All India Total	99023	9271	1709	292+803*	721	143.427+5,30,000MT(B)	441281.60	154887.72	2849

(*) : Superior Kerosene Oil
(A) : HPS - Heavy Petroleum Stock
(B) : Refinery Gas
Source : Central Electricity Authority

XII. FOREIGN TRADE

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS 1970 TO 1990

(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	18919	3718.63	6489	2106.33	25408	5824.96
1990 (P)	20793	5929.62	7454	3541.64	28247	9471.26
			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	-	-	2531	654.84	2531	654.84
1990 (P)	-	-	2605	941.40	2605	941.40
			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	18919	3718.63	3958	1451.49	22877	5170.12
1990 (P)	20793	5929.62	4849	2600.24	25642	8529.86

(P) Provisional.

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS 1970-71 TO 1990-91

(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	3047	652.69	18523	2772.88
1987-88	17732	2986.31	4151	1024.32	21883	4010.63
1988-89	17815	2861.08	6495	1559.84	24310	4420.92
1989-90	19490	4089.35	6564	2254.71	26054	6344.06
1990-91(P)	20699	6118.42	8660	4660.21	29359	10778.63
			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	644.73
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	--	--	2593	695.56	2593	695.56
1990-91(P)	--	--	2648	1003.92	2648	1003.92
			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	556	241.47	16032	2361.66
1987-88	17732	2986.31	739	375.57	18471	3361.88
1988-89	17815	2861.08	4200	1036.21	22015	3897.29
1989-90	19490	4089.35	3971	1559.15	23461	5648.50
1990-91(P)	20699	6118.42	6012	3656.29	26711	9774.71

P = Provisional

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS
1985 TO 1990

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

	1985		1986		1987		1988		1989		1990(P)	
I T E M	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9	10	11	12.	13.
				GROSS IMPORTS								
A. Crude Oil	14811	3808.74	14481	2069.65	17977	3105.25	17712	2811.28	18919	3718.63	20793	5929.62
B. Petroleum Products												
I. Light Distillates	175	57.45	37	7.25	116	35.63	215	64.10	294	91.80	346	147.67
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	346	147.67
II.Middle Distillates	3913	1275.03	3083	710.14	3346	765.77	4551	1000.41	5854	1818.79	6826	3186.89
1. ATF	121	40.25	150	30.32	26	6.23	78	17.78	213	69.19	94	31.09
2. SKO	2466	824.41	2078	496.06	2215	512.00	2407	552.80	2685	870.57	2953	1549.02
3. HSDO	1326	410.37	855	183.76	1101	245.81	2066	429.83	2956	879.03	3779	1606.78
4. LDO	--	--	--	--	--	--			--	--	--	--
III. Heavy Ends	204	108.22	242	100.67	197	83.29	788	208.85	341	195.74	282	207.08
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	262	178.56
3. Waxes	Neg.	0.08	24	21.31	13	12.48	20	22.15	20	21.17	20	28.52
4. Others	--	--	--	--	--	--	--	--	--	--	--	--
Total (B)	4292	1440.70	3362	818.06	3659	884.69	5554	1273.36	6489	2106.33	7454	3541.64
Grand Total (A+B)	19103	5249.44	17843	2887.71	21636	3989.94	23266	4084.64	25408	5824.96	28247	9471.26
				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	2247	840.87
1.Naphtha	1433	404.19	2184	330.19	2619	527.08	2002	403.87	2014	560.14	1608	617.27
2.Others	15	6.39	16	6.46	18	5.03	22	6.91	310	66.93	639	223.60
II.Middle Distillates	128	46.55	146	47.90	172	44.91	193	55.86	60	17.28	85	35.44
1.HSD/LDO	67	22.81	75	24.22	88	22.42	99	27.67	28	8.16	43	16.93
2.Others	61	23.74	71	23.68	84	22.49	94	28.19	32	9.12	42	18.51
III.Heavy Ends	119	24.93	18	4.77	646	85.05	50	6.21	87	10.49	273	65.09
1. FO	110	21.97	16	3.76	644	84.02	49	5.43	84	9.52	272	64.82
2. Others	9	2.96	2	1.01	2	1.03	1	0.78	3	0.97	1	0.27
Total (B)	1695	482.06	2364	389.32	3455	662.07	2267	472.85	2531	654.84	2605	941.40
Grand Total (A+B)	3739	985.94	2364	389.32	3455	662.07	2267	472.85	2531	654.84	2605	941.40
				NET IMPORTS								
A. Crude Oil	12767	3304.86	14481	2069.65	17977	3105.25	17712	2811.28	18919	3718.63	20793	5929.62
B. Petroleum Prod.	2597	958.64	998	428.74	204	222.62	3287	800.51	3958	1451.49	4849	2600.24
Total (Net Imports)	15364	4263.50	15479	2498.39	18181	3327.87	20999	3611.79	22877	5170.12	25642	8529.86

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

IMPORTS/EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS DURING 1985-86 TO 1990-91

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

ITEM	1985-86		1986-87		1987-88		1988-89		1989-90		1990-91(P)	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8	9	10	11	12	13
GROSS IMPORTS@												
A. Crude Oil	15144	3686.80	15476	2120.19	17732	2986.31	17815	2861.08	19490	4089.35	20699	6118.42
B.Petroleum Products												
I. Light Distillates	38	13.90	55	9.90	169	50.26	245	71.79	310	103.34	334	164.26
1. Naphtha	--	--	33	5.73	--	--	--	--	--	--	--	--
2. LPG	32	11.08	22	4.17	149	44.98	241	70.26	302	98.07	329	160.26
3. Others	6	2.82	--	--	20	5.28	4	1.53	8	5.27	5	4.00
II.Middle Distillates	3608	1147.27	2758	550.29	3767	878.67	5469	1271.69	5912	1941.18	8047	4253.60
1. ATF	150	45.84	108	18.08	39	9.64	43	11.21	268	87.98	27	7.98
2. SKO	2568	844.41	1900	383.78	2287	547.49	2924	709.08	2596	888.78	3340	1963.37
3. HSD	890	257.02	750	148.43	1425	317.97	2502	551.40	3048	964.42	4680	2282.25
III. Heavy Ends	219	112.43	234	92.50	246	98.96	781	216.36	342	210.19	279	242.35
1. Furnace Oil	20	4.39	--	--	--	--	465	53.58	--	--	--	--
2. Lubes	195	105.10	219	80.64	231	85.31	292	135.81	322	183.24	256	207.91
3. Waxes	4	2.94	15	11.86	15	13.65	24	26.97	20	26.95	23	34.44
Total (B)	3865	1273.60	3047	652.69	4151	1024.32	6495	1559.84	6564	2254.71	8660	4660.21
Grand Total (A+B)	19009	4960.40	18523	2772.88	21883	4010.63	24310	4420.92	26054	6344.06	29359	10778.63
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	2124	847.90
1. Naphtha	1796	448.52	2220	347.07	2618	517.59	1984	440.87	1932	561.91	1520	621.87
2. Others	16	6.69	17	6.00	19	5.35	83	15.80	446	106.50	604	226.03
II.Middle Distillates	130	48.05	154	45.77	176	46.21	215	63.17	--	--	161	65.96
1.HSD/LDO	66	23.19	80	23.30	89	22.20	100	28.98	--	--	82	31.54
2.Others	64	24.86	74	22.47	87	24.01	115	34.19	--	--	79	34.42
III.Heavy Ends	21	6.32	100	12.39	599	79.60	13	3.79	215	27.15	363	90.06
1. FO/LSHS	14	3.81	99	11.68	598	78.71	10	2.12	215	27.15	357	88.50
2. Others	7	2.51	1	0.71	1	0.89	3	1.67	--	--	6	1.56
Total (B)	1963	509.58	2491	411.23	3412	648.75	2295	523.63	2593	695.56	2648	1003.92
Grand Total (A+B)	2491	644.73	2491	411.23	3412	648.75	2295	523.63	2593	695.56	2648	1003.92
NET IMPORTS												
A. Crude Oil	14616	3551.65	15476	2120.19	17732	2986.31	17815	2861.08	19490	4089.35	20699	6118.42
B. Petroleum Products	1902	764.02	557	241.47	739	375.57	4200	1036.21	3971	1559.15	6012	3656.29
GRAND TOTAL	16518	4315.67	16033	2361.66	18471	3361.88	22015	3897.29	23461	5648.50	26711	9774.71

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

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

@ = Includes NOC Imports

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	15674	22244	-6570	25.9	10.7	980	3319	-2339	17.9	85.2	6.3	14.9
1988-89	20231	28235	-8004	29.1	26.9	1207	3681	-2474	23.2	10.9	6.0	13.0
1989-90 (P)	27681	35412	-7731	36.8	25.4	1841	5074	-3233	52.5	37.8	6.7	14.3
1990-91 (P)	32553	43193	-10640	17.6	22.0	1831	7041	-5210	- 0.5	38.8	5.6	16.3

(P) = Provisional

Source = Ministry of Commerce/Economic survey.

INDIA'S FOREIGN EXCHANGE RESERVES.
(1970-71 TO 1990-91)

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	81.9	280.70	5787.20
1990-91(P)	75.9	6828.30	4388.10

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

* Gold is valued at Rs.53.58 per 10 grams upto May 1966 and at Rs.84.39 per 10 grams upto September 1990 and closer to international market price w.e.f. October 17,1990.

** Include Foreign assets of Reserve Bank of India and Govt. balances held abroad upto 1955-56.

INDIA'S IMPORTS AS A PROPORTION TO OVERALL EXPORTS FROM THE COUNTRY 1970-71 TO 1990-91.

(Rs. Crores)

Y E A R	POL Imports Gross	POL Imports Net	India's Total Exports Gross	Exports Net of POL Exports	Gross POL Imports as % age of total gross Exports	Net POL Imports as % age of total Net 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	4011	3362	15674	15025	25.6	22.4
1988-89	4421	3897	20231	19707	21.9	19.8
1989-90	6344	5649	27681	26985	22.9	20.9
1990-91(P)	10779	9775	32553	31549	33.1	31.0

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

XIII NO. OF PERSONS EMPLOYED

NO. OF PERSONS EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA

(NUMBER)

CATEGORY	1970	1975	1980	1985	1987	1989	1990	1991*
1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Exploration & Production	26051	27067	31413	48700	52397	55656	56477	58187
2. Refining	10715	12327	15334	23074	23810	24188	25751	26479
3. Marketing	20362	19072	19920	27717	31180	34615	36261	33074
4. Others :-								
1.HPCL(Pipeline)	-	-	-	-	-	-	64	87
2.IOC(Pipeline)	487	724	1312	1819	1936	1984	2015	2033
3.ONGC(Pipeline)	346	233	411	496	232	444	497	453
4.OIL(Pipeline)	443	431	492	586	543	591	613	579
5.GAIL (Pipeline)	-	-	-	-	-	-	-	427
6.I.I.P.	588	676	754	778	739	758	758	681
7.E.I.L.	N.A.	1940	2661	3702	3685	3604	3465	3416
8.Others	-	-	-	-	-	-	4045	4262
TOTAL	1864	4004	5630	7381	7135	7381	11457	11938
GRAND TOTAL	58992	62470	72297	106872	114522	121840	129946	129678

CATEGORY-WISE NO. OF PERSONS EMPLOYED IN THE PETROLEUM INDUSTRY IN INDIA

(NUMBER)

CATEGORY	1970	1975	1980	1985	1987	1989	1990	1991*
1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Executive/ Managerial	4793	6461	9311	21108	25458	28588	31178	32446
2. Supervisory	6205	6659	6512	10432	9691	11067	12229	12744
3. Clerical	11457	11723	12403	15878	15923	16407	17254	15993
4. Workmen	36437	37611	44057	59313	63361	63617	65475	63795
5. TOTAL	58892	61454	72283	106731	114433	119679	126136	124978
6. Expatriates/ Foreign Experts/100 On Contract		16	14	141	89	2161	3810	4700
GRAND TOTAL	58992	62470	72297	106872	115208	121840	129946	129678

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

CATEGORY-WISE NO. OF PERSONS EMPLOYED IN VARIOUS SECTORS OF PETROLEUM INDUSTRY IN INDIA.

(NUMBER)

CATEGORY	1970	1975	1980	1985	1987	1989	1990	1991*
1.	2.	3.	4.	5.	6.	7.	8.	9.
EXPLORATION AND PRODUCTION								
1. Executive/ Managerial	1765	1967	3394	10183	12831	14432	15864	17473
2. Supervisory	2774	3538	1994	4537	4133	5092	5594	6040
3. Clerical	3764	3538	3795	5438	5002	4938	4749	4728
4. Workmen	17704	18013	22216	28401	30342	29423	28712	28610
5. TOTAL	26007	27056	31399	48559	52308	53885	54919	56851
6. Expatriates/ Foreign Experts/ Contract	44	11	14	141	89	1771	1558	1336
GRAND TOTAL	26051	27067	31413	48700	52397	55656	56477	58187
PETROLEUM REFINING @								
1. Executive/ Managerial	258	818	2055	3878	4564	4602	5009	5287
2. Supervisory	1076	1313	1050	1648	992	1071	1216	1471
3. Clerical	1219	1568	1791	2728	2690	3265	3427	3256
4. Workmen	7857	8626	10438	14820	15564	14942	14995	14856
5. TOTAL	10677	12325	15334	23074	23810	23880	24647	24870
6. Expatriates/ Foreign Experts/ Contract	38	2	-	-	-	308	1104	1609
GRAND TOTAL	10745	12327	15334	23074	23810	24188	25751	26479
MARKETING								
1. Executive/ Managerial	2367	3519	3318	6047	6972	8320	8586	7884
2. Supervisory	2081	910	1591	1441	1849	2163	2222	2041
3. Clerical	6220	5870	5820	6533	7020	7106	7030	5746
4. Workmen	9680	8770	9191	13696	15339	16964	17302	15716
5. TOTAL	20348	19069	19920	27717	31180	34553	35140	31387
6. Expatriates/ Foreign Experts/ Contract	14	3	-	-	-	62	1121	1687
GRAND TOTAL	20362	19072	19920	27717	31180	34615	36261	33074

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

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

(1981-82 = 100)

Year	Petroleum Products										Energy Items				All Commodities
	Petroleum Crude & Natural Gas	Petrol/ Mogas	Kero-sene	Av-Gas	H.S.D	L.D.O.	FO	Lubri-cants	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	91.8	146.0	129.9	140.9	120.0	124.9	121.5	152.2	131.0	117.9	231.8	162.2	218.9	187.7	165.7
1990-91	99.6	187.3	144.3	193.7	155.2	139.1	134.7	182.1	133.3	125.8	232.6	162.2	242.9	200.9	182.7

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	1.4.87	1.2.89
					(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	138.54	138.54	138.54	138.54
2. Conversion factor	Bbl./MT	7.37	7.37	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	1021.00	1021.00
4. Oil Development Cess	Rs/MT	@	60.00	60.00	60.00	100.00	300.00	300.00	600.00	600.00	900.00
5. Royalty	Rs/MT	@	@	42.00	61.00	61.00#	61.00#	192.00	192.00	314.00	314.00
6. Total Price (including Cess & Royalty)	Rs/MT	270.04	305.41	305.41	324.41	1182.00#	1382.00#	1573.00	1813.00	1935.00	2235.00
					(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	138.54	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			331.65	331.65	1021.00	1021.00	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	600.00	600.00
5. Royalty	Rs/MT			42.00	61.00	192.00	61.00	61.00	192.00	192.00	192.00
6. Total Price (including Cess & Royalty)	Rs/MT			433.65	452.65	1182.00#	1382.00#	1513.00	1813.00	1813.00	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 (EX-STORAGE POINT BOMBAY) OF PETROLEUM PRODUCTS SINCE 8.6.1980.

(Rs./selling Unit)

PRODUCT	Selling Unit	EFFECTIVE DATE											
		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	15.10 1990
1	2	3	4	5	6	7	8	9	10	11	12	13	14
ATF	KL	3217	3537	3872	4122	4740	5240	5240	5240	5240	5240	6560	8200
MS 83/87	"	4538	4908	5438	5438@	6369	6869	6769	6769	7694	7845	8944	11180
MS 93	"	4693	5063	5593	5593	6421	6424	6824	6824	7749	7901	10944	13680
HSDO	"	1960	2330	2650	2850	3078#	3188	3116	3116	3096	3096	3634	4542
SKO	"	1295	1395	1545	1545	1822#	2047	1957	1957	1957	1957	1957	2446
LDO	"	1857	2227	2506	2656	3054	3054	3054	3054	3054	3054	3054	3817
Furnace Oil													
For non-ferts	"	1859	2189	2424	2524	2903	2903	2903	2903	2903	2903	2903	3629
For ferts*	"	829	1039	1274	1274+	1320	1320	1320	1320	1320	1320	1320	1650
Bitumen St. Gr.													
Bulk	MT	1826	2061	2323	2196	2575	2575	2575	2575	2575	2575	2575	3219
Packed	"	2111	2346	2608	2696	3100	3100	3100	3100	3100	3100	3100	3875
Naphtha													
For non-ferts*	MT	2692	2792	2792	2792	3211	3211	3211	3211	3211	3211	3211	4014
For ferts.*	"	1071	1371	1723	1723	1982	1982	1982	1982	1982	1982	1982	2478
JBO *	"	1679	1999	2358	2358	2712	2712	2712	NA	NA	2712	2712	NA
SBP Spirit:													
64/69*	KL	2961	3331	3629	3629	4173	4173	4173	NA	NA	4173	4173	NA
Hexane*	"	2961	3331	3629	3629	4173	4173	4173	NA	NA	4173	4173	NA
MTO 140/205*	"	1774	2044	2348	2348	2700	2700	2700	NA	NA	2700	2700	NA
MTO Laws*	"	1856	2126	2430	2430	2794	2794	2794	NA	NA	2794	2794	NA
LPG:													
Domestic	MT	1966	2301	2634	2634	3029	3729	3449	3449	3449	3449	3449	3449
Bulk	"	2260	2595	2928	2928	3978	3978	3978	5001	5001	5001	5001	6251
Industrial	"	--	--	--	--	5128	5128	5128	6151	6151	6151	6151	7689

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 1.4.1991

(Rs./K.L.)

	Bombay	Madras	Delhi	Calcutta	Kanpur
	MOTOR SPIRIT 87 ON				
Ex-MI Price	11180.09	11180.09	11180.09	11180.09	11180.09
P' Line ch/b Tax/ Price Dif./Shrinkage	--	--	--	--	--
*Railway Freight	--	--	74.94	29.82	221.55
State Surcharge	--	35.00	25.00	10.00	25.00
Octroi/T.Tax	112.00	--	--	20.00	00.00
Toll Tax/Goods Tax/E. Tax	--	--	--	2.88	--
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 FDZ	--	--	--	--	--
Sub Total	11363.45	11286.45	11351.39	11314.15	11498.00
CST	--	--	--	--	--
Shrinkage	--	--	--	--	--
Sales Tax	2272.69	2031.56	794.60	1131.42	1149.80
SC on ST	--	304.73	--	--	--
Dealers Comm.	80.00	80.00	80.00	80.00	80.00
Sub Total	13716.14	13702.74	--	--	--
ADDL. Tax	--	101.58	--	--	--
Shrinkage Allowance	--	--	--	--	--
Total RS/KL	13716.14	13804.32	12225.99	12525.57	12727.80
R.S.P. RS/LTR	13.72	13.81	12.23	12.53	12.73
Rate of Sales Tax	20%	18%	7%	10%	10%
Rate of Surcharge on ST		15%			
Rate of Addl. Tax		5%			
	HIGH SPEED DIESEL OIL				
Ex-MI Price	4541.91	4541.91	4541.91	4541.91	4541.91
P' Line Charge/B. Tax/ Price Differential	--	--	--	--	
* Rly. Freight	--	--	76.74	21.93	225.33
State Surcharge	--	35.00	25.00	1.00	5.00
Octroi/T.Tax	76.03	--	4.68	20.00	--
Toll Tax/Goods Tax	--	--	--	--	--
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
Octroi Delivery Charge FDZ	--	--	--	2.88	--
Sub Total	4645.21	4604.18	4675.60	4614.99	4799.51
CST	--	--	--	--	--
Shrinkage	--	--	--	--	--
Sales Tax	929.04	644.59	327.29	553.80	575.94
SC on ST/Addl. Tax	--	96.69	--	--	--
Dealers Comm.	40.00	40.00	40.00	40.00	40.00
Sub Total	--	--	--	--	--
Shrinkage/Add. Tax	--	32.23	--	--	--
R.S.P. Rs/Kl	5614.25	5417.69	5042.89	5208.79	5415.45
		LIGHT DIESEL OIL			
Ex.MI Price	3817.46	3817.46	3817.46	3817.46	3817.46
State Surcharge	--	35.00	25.00	--	5.00
Rly/Frt/Frt.Differential	--	--	97.24	22.60	287.71
Octroi/T.Tax	46.55	--	4.82	20.00	--
Sub Total	3864.01	3852.46	3944.52	3860.06	4110.17
Entry Tax	00.00	00.00	00.00	00.00	00.00
Sub Total	3864.01	3852.46	3944.52	3860.06	4110.17
Sales Tax	309.12	539.34	276.12	463.21	493.22
Retailers margin+TPT charges + other charges	00.00	--	--	--	--
Total RS/Kl	4173.13	4391.80	4220.64	4323.27	4603.39
Rate of ST	8%	14%	7%	12%	12%

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1991

	Bombay	Madras	Delhi	Calcutta	Kanpur
SUPERIOR KEROSENE OIL (RS/KL)					
Ex-MI Price	2446.16	2446.16	2446.16	2446.16	2446.16
Rly.Freight/Differential	--	0.00	61.72	20.81	184.75
State Surcharge		35.00	25.00	--	--
Octroi	58.05	--	--	--	--
Sub Total	2504.21	2481.16	2532.88	2466.97	2630.91
Entry tax/T.Tax/SSB T.Tax	--	--	15.00	--	--
Sub Total	2504.21	2481.16	2547.88	2466.97	2630.91
Sales Tax	Exempted	99.25	76.44	123.35	263.09
SC on Sales Tax	--	14.89	--	--	--
Addl. SC on ST	--	4.96	--	--	--
Transportation	44.83	30.00	58.24	30.00	50.00
Wholesalers/Dealers Comm.	30.30	8.00	14.08	30.30	30.30
Octroi	--	--	--	--	--
Leakage, Ext. Ord. Allo.	38.50	38.00	--	--	--
Other Expenses	--	--	--	--	--
Sub Total	2617.84	2676.26	2696.64	2650.62	2974.30
Retailers Comm.	39.70	275.00	73.33	39.70	50.00
Local Transportation	--	--	--	209.68	20.00
Leakage Ext.Ord. Allo.	--	--	--	--	--
Rounded off to			0.03		--
R.S.P. RS./KL	2657.54	2951.26	2770.00	2900.00	3044.30
R.S.P. RS./LTR	2.66	2.95	2.77	2.90	3.04
LIQUIFIED PETROLEUM GAS (Rs.14.2 Kg.cylinder)					
Price at pricing market	51.73	51.73	53.62	53.83	54.43
State Surcharge	--	--	--	--	--
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	55.18
Sales Tax	2.15	4.20	2.74	8.27	4.41
SC on ST	--	0.42	--	--	1.10
Addl. SC on ST	--	0.21	--	--	--
Billable Rate	55.94	57.31	57.49	63.39	60.69
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	64.06
R.S.P. for 14.2. Kg. Cyl.	56.15	57.44	57.61	63.20	60.64
Rate of Sales Tax	4%	8%	5%	15%	8%
Rate of SC on Sales Tax	--	10%	--	--	25%
Rate of Addl. SC on ST.	--	5%	--	--	--

PRICE BUILD-UP OF SELECTED PETROLEUM PRODUCTS AS ON 1.4.1991.

(Rs./KL)

	Bombay	Madras	Delhi	Calcutta	Kanpur
FUEL OIL (NON-FERTILIZER)					
Ex-MI Price	3628.83	3628.83	3628.83	3628.83	--
State Surcharge	--	35.00	25.00	--	--
Rly. Frt/Frt. differential	--	--	104.58	24.31	--
Octroi/SSB T.Tax	73.92	--	5.18	20.00	--
Sub Total	3702.75	3663.83	3763.59	3673.14	--
Entry Tax	0.00	0.00	0.00	0.00	--
Sub Total	3702.75	3663.83	3763.59	3673.14	--
Sales Tax	296.22	366.83	263.45	293.85	--
SC on Sales Tax	--	18.32	--	--	--
Addl.SC ON ST	--	18.32	--	--	--
Total RS/KL	3998.97	4066.85	4027.04	3966.99	--
RATE OF ST	8%	10%	7%	8%	--
Rate of SC on ST	--	5%	--	--	--
Rate of Addl. SC	--	5%	--	--	--
Note : At Kanpur, there is no Storage facility.					
ATF (DOMESTIC AIRLINES)					
Ex-MI Price	8200.38	8200.38	8200.38	8200.38	8200.38
Frt. Differential	--	--	--	20.39	--
Rly.Frt/	--	0.00	77.53	--	234.80
BMC Octroi/Local Levy	103.50	0.00	--	--	10.00
Entry Tax	--	--	--	132.10	--
Shakurbasti T.Tax	--	--	15.00	--	--
State Surcharge	--	--	25.00	--	--
Air Field Charge	24.44	24.44	24.44	24.44	41.94
Post Air Field Price	8328.32	8224.82	8342.35	8377.31	8487.12
ATF FOR INTERNATIONAL AIRLINES ($/KL)					
Basic Price	367.20	367.20	367.20	367.20	
Entry Tax	0.00	0.00	0.00	7.34	
Sales Tax	110.16	73.44	25.70	93.64	
			(+ST on SSB T. Tax)		
SC on Sales Tax	0.00	7.34	0.00	0.00	
Addl. SC on ST	0.00	3.67	0.00	0.00	
Total for Non SCH. Airlines	477.36	451.65	392.90	*468.18	
Total For SCH. Foreign Airlines Non-SCH. Passanger Aircraft	367.20	451.65	367.20 (+ST on SSB T. Tax)	374.54	

Note: Add SSB T. Tax @ Rs. 15/- Per KL(This is to be converted into USD/Kl at the exchange rate prevailing on the date of supply.

* Sales TAx @ 25% for Foreign/Private/Executive/Chartered/Embassy/Defence Aircrafts only.

Trends in Retail Selling Prices of Selected Petroleum 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
1.4.1991	13.72	12.53	12.23	13.81	12.73
	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
1.4.1991	5.62	5.20	5.05	5.42	5.42

Trends in Retail Selling Prices of Selected Petroleum 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
1.4.1991	2.66	2.90	2.77	2.95	3.04
	LIQUIFIED PETROLEUM 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@
1.4.1991	56.15	63.20@	57.61@	57.44@	60.64@

@ = For 14.2 Kg. Cylinder.

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

	Slab of Annual Volumes of Sales (KL / Annual)							Slab of Annual Volumes of Sales (KL / Annual)							
	Prior to 1.7.1982			Effective From 1.7.1982				Prior to 1.7.1982			Effective from 1.7.1982				LPG
EFFECTIVE FROM	0- 480	481- 1080	Over 1080	0- 360	361- 600	601- 1080	Over 1080	0- 600	601- 1200	Above 1200	0- 360	361- 600	601- 1080	above 1080	Rs./ Cylinder
	(M O T O R S P I R I T)					(Rs. / KL)		(H I G H S P E E D D I E S E L O I L)						(Rs./KL)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. 4.1977	80*	50*	35*												
15. 7.1980	100	70	50					50	25	20					Prior to
1. 3.1981	107	75	55					55	30	25					1st March
16. 8.1981	114	82	61					58	33	28					1982
1. 3.1982								60	35	30					3.37
1.10.1982				134	98	86	69								3.62
15. 2.1983											79	58	42	36	
1. 9.1983				135	99	87	70				81	60	43	37	
17. 3.1985				146	108	95	76								
6. 2.1986				151	113	99	79				83	62	44	38	
19. 1.1987											84	63	45	39	
9. 1.1988				164	124	109	87								5.30 **
21.10.1989				234	165	148	128				129	87	69	63	
20. 3.1990				250	179	160	138				135	92	72	66	
15.10.1990				279	204	182	155				145	101	77	70	

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

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

Note: The rates of dealership commission fixed at 3 Annas per Imperial Gallon for MS in 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)	MS (RS./KL.)	HSDO (Rs./KL)
Upto 360	80	50
361 to 720	35	10
721 and above	25	10

XV. 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.) FOR 1990-91 & (B.E.) FOR 1991-92

(Rs./Crores)

Products	Actuals									
	1970 -71	1975 -76	1980 -81	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91 (RE)	1991 -92 (BE)
1.	2	3	4	5	6	7	8	9	10	11
A. EXCISE DUTIES										
1. Mogas	173	404	493	749	814	903	1034	1200	1276	1366
2. Kerosene Oil	121	161	124	203	233	250	241	268	267	282
3. Refined Diesel Oil & Vaporising Oil	232	300	280	563	596	646	683	731	768	806
4. Diesel Oil (N.E.S)	23	21	20	23	27	28	29	38	37	41
5. Furnace Oil	33	49	45	39	37	34	46	53	51	48
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	359	399	441
9. Calcined Pet. Coke	-	3	5	(included in item No-6 above)						
10. Petroleum Gas	-	-	-	33	50	58	59	66	69	74
TOTAL (A)	608	1040	1158	1845	2034	2199	2406	2715	2867	3058
B. CUSTOM DUTIES										
1. Petroleum Crude	-	13	16	874	857	1862	1917	2149	3150	3390
2. Mogas	5	9	8	6	-	-	-	-	-	-
3. Kerosene Oil	10	37	83	101	218	274	396	282	555	616
4. Batching Lubricating & Other Mineral Oils	9	21	103	35	-	-	-	-	-	-
5. HSD & Vap. Oil	1	26	127	33	56	84	160	165	350	472
6. Indl. Fuel Oil	5	9	17	1	-	-	-	-	-	-
TOTAL (B)	30	115	354	1050	1131	2220	2473	2596	4055	4478
GRAND TOTAL (A+B)	638	1155	1512	2895	3165	4419	4879	5311	6922	7536

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 NET NATIONAL PRODUCTS.

Year	Net National Product at factor cost 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	14160	416	101	3.1	0.8	24.3
1965-66	22107	898	261	4.4	1.3	29.1
1970-71	36362	1759	608	5.1	1.8	34.6
1971-72	38583	2061	708	5.6	1.9	34.4
1972-73	42382	2324	767	5.8	1.9	33.0
1973-74	52241	2602	874	5.2	1.7	33.6
1974-75	61194	3231	1011	5.4	1.7	31.3
1975-76	64531	3845	1040	6.2	1.7	27.1
1976-77	69408	4221	1110	6.3	1.7	26.3
1977-78	79671	4448	1152	5.9	1.5	25.9
1978-79	85255	5194	1290	6.4	1.6	24.0
1979-80	92314	6148	1407	6.9	1.6	22.9
1980-81	110685	6500	1158	5.9	1.0	17.8
1981-82	128797	7421	1294	5.8	1.0	17.4
1982-83	141875	8059	1408	5.7	1.0	17.5
1983-84	166550	10222	1430	6.2	0.9	14.0
1984-85*	185062	11151	1605	6.0	0.9	14.4
1985-86*	205810	13008	1845	6.3	0.9	14.2
1986-87*	227427	14489	2034	6.3.	0.9	14.0
1987-88*	257961	16347	2199	6.3.	0.9.	13.5
1988-89*	310015	18825	2406	6.1	0.8	12.8
1989-90@	346994	22290	2715	6.4	0.8	12.2
1990-91	NA	24500	2867	NA	NA	11.7

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

* : Provisional
@ : Quick Estimates

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	50092	2406	2473	4879	974.0
1989-90	54095	2715	2596	5311	981.8
1990-91(P)	55035	2867	4055	6922	1263.8

(P) = Provisional

ROYALTY AND OIL DEVELOPMENT CESS PAID BY OIL COMPANIES ON PRODUCTION OF CRUDE OIL AND NATURAL GAS SINCE 1973-74 TO 1990-91 (Rs./Lakhs)

YEAR	ROYALTY PAID ON CRUDE OIL						ROYALTY PAID ON NATURAL GAS					OIL DEVELOPMENT CESS
	Western Region	Eastern Region	Southern Region	Total On Shore	Bombay High Off Shore	Total	Western Region	Eastern Region	Southern Region	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	11561	13479	397	25437	40118	65555	1194	399	34	10409	12036	291411
1990-91	39424	26936	1291	67651	136037	203688	1283	421	68	12038	13810	278197

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.

3) Figures of Crude Oil Royalty for 1990-91 included arrears for the period 1.4.87 to 31.3.90 arising on account of revision in roualty rate from Rs. 192 to Rs. 314 per M.T. w.e.f. 1.4.87 vide notification dated 18.2.91.

4) The total arrears for the period 1.4.87 to 31.3.91 @ Rs. 122 per M.T. amounting to Rs. 985.09 crores have not been paid as the Govt. is contemplating payment by book adjustments out of deposits of OCC in the Public Account of India.

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 15.10.1990

(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.
A.T.F.	KL	8200.38	352.07	4.3
Motor Spirit 87	KL	11180.09	2327.50	20.8
Motor Spirit 93	KL	13680.09	2328.92	17.0
H.S.D.O.	KL	4541.91	347.49	7.7
S.K.O.	KL	2446.16	330.44	13.5
L.D.O.	KL	3817.46	160.91	4.2
F.O. (Non-Fertilizers)	KL	3628.83	150.71	4.2
F.O. (Fertilizers) *	KL	1650.30	--	--
Bitumen St.Grade (Bulk)	MT	3218.56	115.50	3.6
Bitumen St.Grade (Packed)	MT	3874.89	168.00	4.3
Naphtha for non-Ferts.*	MT	4013.75		
Naphtha for Ferts.*	MT	2477.89		
L.P.G. (Domestic Packed)	MT	3448.98	273.00	7.9
L.P.G. (Industrial) (Bulk Essential)	MT	6251.38	273.00	4.4
L.P.G. Industrial Bulk Non-Essential	MT	7689.24	273.00	3.6

* = 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 1.4.1991

SNo.	PRODUCTS	<1 Andhra Pradesh (1)	Arunachal Pradesh (2)	Assam (3)	Bihar (4)	Goa (5)	Gujarat (6)	Haryana (7)
A.	CRUDE OIL & GAS							
1.	Crude Oil	4.00%	No Tax	4%	4%	--	4%	4%
2.	Natural Gas	14.48%	No Tax	8%	--	--	16%+20% Surcharge	--
B.	PETROLEUM PRODUCTS							
3.	Aviation Spirit	27.31%	No Tax	25%	25%	12%	30% Bonded & duty paid 9%	6%
4.	Aviation Turbine Fuel	27.31%	No Tax	25%	25%	12%	30% Bonded & duty paid 23%	6%
5.	Motor Spirit	27.31%	Do	12%	9%	12%	20%	6%
6.	H.S.D.	17.44%	Do	11%	14%	12%	18%	6%
7.	L.D.O.	17.44%	Do	11%	14%	12%	7%	8%
8.	M.L.O.	17.44%	Do	8%	9%	7%	10%	8%
9.	S.K.O.	6.44%	Do	2%	6%	Exempt	3%	8%
10.	I.K.O.	6.44%	Do	2%	5%	Exempt	3%	8%
11.	F.O.	6.44%	Do	8%	8%	12%	10%	8%
12.	M.T.O.	6.44%	Do	8%	9%	7%	10%	8%
13.	Lubes	14.48%	Do	10%	9%	7%	12%	8%
14.	Greases	14.48%	Do	10%	9%	7%	12%	8%
15.	Petroleum Naphtha	14.48%	Do	8%	9%	12%	12%	8%
16.	Bitumen	14.48%	Do	8%	9%	7%	10%	8%
17.	Petroleum Coke	4.00%	Do	4%	4%	4%	4%	4%
18.	Indane (LPG)	14.48%	Do	8%	9%	7% <2	12%+4% CST$	8%
19.	Transformer Oil	6.44%	Do	8%	9%	7%	10%	8%
20.	H.B. Fluid	14.48%	Do	10%	9%	7%	12%	8%
21.	L.S.H.S.	6.44%	Do	8%	9%	7%	12%	8%

$ = Payable in case of Sales outside Gujarat. In case of Sales within Gujarat no sales tax is payable.

<1 These rates are inclusive of :
1. Turnover Tax @ 1.5% on taxable turnover.
2. Surcharge @ 10% on Sales Tax.

<2 LPG for household purpose is exempted.

Continued...../-

SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS AS ON 1.4.1991

SNo.	PRODUCTS	Himachal Pradesh	J & K	Karna-taka	Kerala	Madhya Pradesh	Mahara-shtra	Manipur
		(8)	(9)	(10)	(11)	(12)	(13)	(14)
A.	CRUDE OIL & GAS							
1.	Crude Oil	4%	--	4%	4%	4%	4%	4%
2.	Natural Gas	--	--	--	--	--	8%#	7%
B.	PETROLEUM PRODUCTS							
3.	Aviation Spirit	5%	8%	20%	10%	14%	9% Duty paid	10%
4.	Aviation Turbine Fuel	5%	8%	20%	10%	14%	Bonded 30% Duty paid 23%	10%
5.	Motor Spirit	5%	4%	20%	15%	18%	20%	10%
6.	H.S.D.O.	5%	8%	20%	20%	18%	20%	7%
7.	L.D.O.	8%	8%	20%	20%	16%	8%	7%
8.	M.L.O.	8%	8%	7%	10%	14%	8%	7%
9.	S.K.O.	8%	Exempted	5%	4%	3%	Exempted	3%
10.	I.K.O.	8%	-Do-	5%	4%	3%	-Do-	3%
11.	F.O.	8%	8%	13%	10%	14%	8%	7%
12.	M.T.O.	8%	8%	--	8%	14%	8%	7%
13.	Lubes	8%	8%	15%	12%	12%	8%	4%
14.	Greases	8%	8%	15%	12%	12%	8%	4%
15.	Petroleum Naphtha	8%	8%	10%	5%	14%	8%	7%
16.	Bitumen	8%	8%	10%	8%	14%	8%	7%
17.	Petroleum Coke	4%	--	4%	4%	4%	4%	4%
18.	Indane (LPG)	8%	8%	15%	15%	16%	4% <3	7%
19.	Transformer Oil	8%	8%	13%	12%	14%	8%	--
20.	H.B. Fluid	8%	8%	10%	12%	12%	10%	--
21.	L.S.H.S.	8%	8%	7%	8%	14%	--	7%

<3 Only for L.P.G. Cylinders below 15 kgs.
For Cylinders above 15 kg - Rate of Sales tax is 8%

6% ST is payable in case of supplies to electricity Companies. Additional sales tax of 12% on sales tax is required to be borne by the Supplier.

Continued...../-

SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS AS ON 1.4.1991

SNo.	PRODUCTS	Megha-laya	Mizo-ram	Naga-land	Orissa	Punjab **	Rajas-than	Tamil-Nadu
		(15) Rs.per KL/MT*	(16) Rs.per KL	(17) Rs.per KL/MT*	(18)	(19)	(20)	(21)
A.	CRUDE OIL & GAS							
1.	Crude Oil	--	2%	3%	4%	4%	4%	4%
2.	Natural Gas	7%+ 2% S/c	10%	6%				8%+10% Surcharge
B.	PETROLEUM PRODUCTS							
3.	Aviation Spirit	--	--	--	16%	7%	10%	20%
4.	Aviation Turbine Fuel	--	--	--	12%	8.8%	10%	20%
5.	Motor Spirit	340+ 6.80 S/c	200	300	12%	7%	18%	18%
6.	H.S.D.O.	150 + 3.00 S/c	100	90	16%	4%	16%	14%
7.	L.D.O.	--	100	90	16%	8.8%	16%	14%
8.	M.L.O.	--	--	--	12%	8.8%	10%	10%
9.	S.K.O.	30	--	30	Exempted	8.8%	10%	4%
10.	I.K.O.	--	--	30	-Do-	8.8%	10%	4%
11.	F.O.	--	--	--	12%	8.8%	10%	10%
12.	M.T.O.	--	--	--	12%	8.8%	15%	10%
13.	Lubes	150 + 3.00 S/c	150	110	16%	8.8%	10%	10%
14.	Greases	110*+ 2.20 S/c	150	500*	16%	8.8%	10%	10%
15.	Petroleum Naphtha	--	--	--	12%	8.8%	10%	10%
16.	Bitumen	--	--	--	12%	8.8%	10%	8%
17.	Petroleum Coke	--	2%	--	4%	4%	4%	4%
18.	Indane (LPG)	--	10%	--	12%	8.8%	10%	8%
19.	Transformer Oil	--	--	--	--	8.8%	10%	--
20.	H.B. Fluid	--	--	--	--	8.8%	10%	8%
21.	L.S.H.S.	--	--	--	--	8.8%	--	10%

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

Continued...../-

SALES TAX RATES APPLICABLE ON CRUDE OIL, NATURAL GAS AND PETROLEUM PRODUCTS AS ON 1.4.1991

SNo.	PRODUCTS	Tripura	Utter@@ Pradesh	West Bengal	Chandi garh	Delhi	Daman & Diu
		(22)	(23)	(24)	(25)	(26)	(27)
A.	**CRUDE OIL & GAS**						
1.	Crude Oil	4%	4%	4%	--	4%	--
2.	Natural Gas	12%	--	--	--	--	--
B.	**PETROLEUM PRODUCTS**						
3.	Aviation Spirit	12%	10%	9%	15 PPL	7%	12%
4.	Aviation Turbine Fuel	12%	10%	25%	15 PPL	7%	12%
5.	Motor Spirit	8%	10%	10%	15 PPL	7%	--
6.	H.S.D.	5%	12%	12%	10 PPL	7%	--
7.	L.D.O.	5%	12%	12%	7%	7%	--
8.	M.L.O.	--	10%	8%	7%	7%	--
9.	S.K.O.	5%	10%	5%	7%	3%	Exempted
10.	I.K.O.	4%	10%	Exempted	7%	3%	Exempted
11.	F.O.	5%	6.25%	8%	7%	7%	--
12.	M.T.O.	--	10%	8%	7%	7%	7%
13.	Lubes	12%	10%	11%	7%	7%	--
14.	Greases	12%	10%	11%	7%	7%	--
15.	Petroleum Naphtha	5%	10%	8%	7%	7%	--
16.	Bitumen	5%	10%	8%	7%	7%	--
17.	Petroleum Coke	12%	4%	4%	--	4%	--
18.	Indane (LPG)	12%	10%	15%	7%	5%	--
19.	Transformer Oil	--	10%	8%	7%	7%	--
20.	H.B. Fluid	--	10%	11%	7%	7%	--
21.	L.S.H.S.	--	6.25%	8%	7%	7%	--

@@ Rates are inclusive of additional tax @ 25% on Sales Tax wherever applicable.

Note: 1. PPL means Paise per litre.
2. PP Kg. means paise per Kg.
3. Wherever (-) is shown against any of the product rates, same indicates Sales Tax rate not available.

Continued...../-

IN ADDITION TO THE SALES TAX PAYABLE THE FOLLOWING TAX AMOUNTS ARE ALSO PAYABLE/RECOVERABLE W.E.F. 1.4.1991

1. Andhra Pradesh :
   1. Turnover tax @ 1.5% on taxable turnover above Rs. 1 crore. This is recoverble from the customers.
   2. Surcharge @ 10% on tax is payable. This is recoverable from the customers.

   Above levies are already included in the billable rates.

2. 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. (Not applicable on MS, HSD, LDO, SKO, Furnace Oil, Av.Gas, ATF and Declared goods.)

3. Chandigarh: Additional tax @ 10% on Sales Tax under General Sales Tax Act (i.e.not applicable on MS, ATF, JP-4, HSD, Av.Gas). This is recoverable from the customers.

4. Goa : Addl. Sales Tax @ 10% of Sales Tax is payable but same is not recoverable from the customers.

5. Gujarat :
   1) Addl. Sales tax at 20% on Sales Tax. This is recoverable from the customer. This is not payable on MS, HSD, ATF and Avn. Spirit.
   2) Turnover Tax :- at the following rate is payable, but not recoverable from the customers.
      a) Up to taxable turnover of Rs. 50 lakhs ..... Nil
      b) On taxable turnover exceeding Rs. 50 Lakhs but less than Rs. 2 crores ..... @ 1% of taxable turnover in excess of Rs.50 Lakhs
      c) On taxable turnover between Rs. 2 crores & Rs. 4 crores .....Rs. 1.5 Lakhs plus @ 1.25% of taxable turnover in excess of Rs. 1.5 Lakhs.
      d) On Taxable Turnover exceeding Rs. 4 crores. ..... Rs. 4 Lakhs plus @ 1.5% on taxable turnover in excess of Rs. 4 crores.

6. Haryana: Surcharge at 10% on Sales Tax on all products. This is recoverable from the customers.

7. J & K : Surcharge @ 5% of Sales Tax is payable. This is recoverable from the customers. This does not apply to produot falling under Motor Spirit Tax Act (i.e. Motor Spirit, HSD).

8. Karnataka : 1.25% Turnover Tax on the turnover between Rs.10 lakhs and Rs.200 lakhs and 1.75% if turnover is above Rs.200 lakhs. This is payable but same is not recoverable from the customers.

9. Kerala :
   1) Surcharge at 8% of Sales Tax is payable, but not recoverable from the customers.

2) @.3% 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.

10. Maharashtra:
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.

11. Meghalaya: Surcharge @ 1% on tax on MS, HSD, LPG and F.O. This is recoverable from the customers.

12. Orissa : Surcharge @ 10% on Sales Tax - This cannot be recovered from the customers.

13. 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). This is included in billable rates.

14. 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) Township constituted under the Mettur, Courtallan or Bhavanisagar Township Acts.

d) All other areas ..... 8%.

2. Additional Tax
i) @ 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.

3. Additional Surcharge
@ 5% on tax on the sale of products in Municipal Corporation of Madras and within 32 KMs from outer perepheral limits of Municipal Corporation of Madras. This is recoverable from the customers.

15. Tripura: Additional tax @ 0.25% on taxable turnover. This cannot be recovered from the customers.

16. Uttar Pradesh : 25% Suroharge on Sales Tax. This is recoverable from the Customers. This is included in the billable rates.

17. Wast Bengal : Turnover Tax @ 1.5% of the gross turnover of the bill is payable, but same is not recoverable from the customer.

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 1990-91.

(Rs.in lakhs)

STATE	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
1. Crude Oil							
Assam	193	2550	3456	3407	3537	4290	4611
Gujarat	476	2248	2965	3334	3627	4731	6195
Arunachal Pradesh	1	32	40	21	22	30	32
Nagaland	-	31	54	45	71	83	87
Maharashtra	-	6965	9220	10924	6835	7428	15500
Tamil Nadu	-	-	3	9	20	152	257
Total (1)	670	11826	15738	17741	14112	16714	26682
2. Natural Gas							
Assam	56	114	48	366	326	422	429
Gujarat	214	341	347	4052	7280	11199	9952
Maharashtra* (Bombay High)	-	1356	4046	4537	4319	6204	5628
Arunachal Pradesh	-	-	-	Neg.	17	48	82
Tamil Nadu	-	-	-	Neg.	3	6	17
Tripura	-	-	3	15	18	17	53
Total (2)	270	1811	4444	8970	11963	17895	16161
3. POL Products							
(a) States							
Andhra Pradesh	4727	10758	12764	13597	14883	22318	25062
Assam	798	2688	2463	3350	3519	4509	3654
Bihar	2992	7078	7936	7328	8334	10326	11239
Gujarat	7254	15042	19045	21030	26328	34430	39456
Haryana	678	2026	2341	2251	2557	3764	4584
Himachal Pradesh	20	81	341	179	186	181	261
Jammu & Kashmir	264	483	571	542	570	686	759
Karnataka	4034	10531	12311	11439	12256	16748	21801
Kerala	4854	10737	13543	11642	14304	8617	27512
Madhya Pradesh	2760	5061	6468	5488	7040	10160	13168
Maharashtra	9342	18762	24447	20556	24245	37124	52978
Manipur	29	44	81	163	179	183	164
Meghalaya	1	Neg.	Neg.	1	1	1	1
Mizoram	-	-	1	15	18	20	19
Nagaland	Neg.	Neg.	1	13	37	68	69
Orissa	748	1781	2032	1559	1931	2915	3958
Punjab	1220	2345	3410	3474	3615	5152	6326
Rajasthan	2244	5768	6332	5624	7592	11681	13508
Tamil Nadu	8407	19766	21818	19083	21673	31130	39450
Tripura	38	107	115	203	256	287	264
Uttar Pradesh	4637	13373	15269	16334	17680	22682	28995
West Bengal	4366	10883	11322	10447	11524	16624	18991
Goa	558	1507	1717	1568	1373	2005	2367
(b) Union Territories							
Chandigarh	34	28	39	41	67	61	61
Delhi	1859	3923	4259	4420	4497	6160	7829
Pondicherry/Mane	-	-	-	17	20	--	2
Total (3)	61864	142772	168626	160364	184685	247832	322478
GRAND TOTAL	62804	156409	188808	187075	210760	282441	365321

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

(xvi) TRANSPORTATION

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

	COASTAL OIL TANKER				TOTAL		OFFSHORE		SPECIALISED		TOTAL OFF-		OVERSEAS								OVERSEAS		TOTAL ALL	
	PRODUCT CARRIERS		CRUDE OIL CARRIERS		COASTAL OIL TANKER		SUPPLY VESSELS		VESSELS FOR OFFSHORE		SHORE SUPPLY VESSELS & SPECIALIESD VESSELS FOR OFFSHORE		ORE OIL BULK		CRUDE OIL CARRIERS		PRODUCT CARRIERS		LPG 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	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.	22	23	24	25
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	185.6	2	82.3	15	267.9	57	73.1	25	49.7	82	122.8	9	988.9	22	2121.2	25	575.5	-	-	56	3685.6	153	4076.3
1990	13	185.6	2	82.2	15	267.8	57	69.7	30	70.5	87	140.2	9	990.5	22	2121.2	25	601.5	-	-	56	3713.2	158	4121.2
1991	14	186.1	2	82.2	16	268.3	63	75.9	31	70.7	94	146.6	9	990.5	23	2206.4	25	601.5	1	17.0	58	3815.4	168	4230.3

* As on 31st December of each year.

** As on 31st March of each year from 1989 onwards.

Source: Ministry of Transport

INDIAN TANKER FLEET OFFSHORE SUPPLY VESSELS AS ON 31.3.1991.

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.
COASTAL TRADE			
TANKERS (Product Carriers)			
A. The Shipping Corpn. of India Ltd. Bombay			
1. m.t. Visveswaraya	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. Ltd., Bombay			
12. m.t. Raj Sevak	1966	750	1356
F. The Shipping Credit & Inv. Co.of India Ltd., Bombay.			
13. m.t. Nand Smiti	1982	4275	6600
G. Jaisu Shipping (P) Ltd.			
14. m.t. Al-Nions	1976	298	508
Total 14 Vessels		116392	186086
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 Bhabha	1982	27489	41126
Total 2 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
10. m.v. Malaviya Five	1980	499	993
11. m.v. Malaviya Six	1981	499	980
12. m.v. Malaviya Seven	1982	985	1035
13. m.v. Malaviya Eight	1982	985	1035
		6876	8693
C. M/s.Essar Shipping Ltd., Bombay			
14. m.v. Nand Godavari	1984	1313	1750
15. m.v. Nand Panna	1984	1313	1750
16. m.v. Nand Krishna	1984	1313	1750
17. m.v. Nand Heera	1984	1313	1750
18. m.v. Nand Cauvery	1984	1299	1868
		6551	8868
D. VNS OFFSHORE SERVICES COMPANY, Bombay			
19. m.v. Nand Ratna	1969	487	737
E. M/s.Hede Ferromina Pvt.Ltd., Goa.			
20. m.v. Ferromina Harvest	1971	629	759
F. M/s.Varun Shipping Co.Ltd., Bombay.			
21. m.v. Neel Kamal	1983	999	1084
22. m.v. Neel Akash	1984	999	1086
23. m.v. Neel Nidhi	1983	1577	1085
24. m.v. Neel Jalini	1983	1577	1085
		5152	4340
G. The Shipping Corpn.of India.Ltd., Bombay.			
25. m.v. Feroze Gandhi	1984	1310	1391
26. m.v. O.P.Srivastava	1984	1310	1406
27. m.v. SCI-01	1984	1310	1408
28. m.v. SCI-02	1984	1310	1410
29. m.v. SCI-03	1984	1310	1404
30. m.v. SCI-04	1984	1310	1445
31. m.v. SCI-05	1984	1310	1452
32. m.v. SCI-06	1984	1310	1451
33. m.v. Capt. F.V.Juvale (Ex-SCI-07)	1985	1310	1442
34. m.v. Dr.Nagendra Singh	1985	1310	1450
		13100	14259

Owner/Name of the Ship	Year of Built	G.R.T. (Tonnes)	D.W.T. (Tonnes)
1.	2.	3.	4.
H. The Oil & Natural Gas Commission, Bombay.			
35. m.v. Sindhu-01	1984	1310	1450
36. m.v. Sindhu-02	1985	1310	1450
37. m.v. Sindhu-03	1985	1310	1450
38. m.v. Sindhu-04	1986	1310	1450
39. m.v. Sindhu-06	1985	1302	1457
40. m.v. Sindhu-07	1985	1302	1400
41. m.v. Sindhu-08	1985	1302	1400
42. m.v. Sindhu-09	1985	1302	1400
43. m.v. Sindhu-10	1985	1302	1400
44. m.v. Sindhu-11	1985	1302	1400
45. m.v. Sindhu-14	1987	1323	1450
46. m.v. Samudrika - 01	1986	949	950
47. m.v. Samudrika - 02	1986	949	950
48. m.v. Samudrika - 03	1986	949	950
49. m.v. Samudrika - 05	1986	951	1240
50. m.v. Samudrika - 06	1986	949	950
51. m.v. Samudrika - 07	1987	949	950
52. m.v. Samudrika - 08	1986	949	950
53. m.v. Samudrika - 09	1986	949	950
54. m.v. Samudrika - 10	1986	949	950
55. m.v. Samudrika - 11	1986	949	950
56. m.v. Samudrika - 12	1986	949	950
57. m.v. Samudrika - 14	1985	954	950
58. m.v. Samudrika - 15	1985	954	950
59. m.v. Samudrika - 16	1985	954	950
60. m.v. Samudrika - 17	1985	954	950
61. m.v. Samudrika - 18	1985	954	950
62. m.v. Sagarika - 01	1976	736	818
63. m.v. Sagarika - 02	1976	671	933
		30993	32948
Total 63 Vessels		68193	75854
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	4485	2965
		19933	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 Sanchani (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
L. M/s VNS Offshore Services Co., Bombay			
31. Kansi Gouri (Tug) (Ex. Mocambique)	1956	132	192
Total 31 Vessels		94848	70708

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			
A. 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
B. 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
C. The Shipping Credit & Investment Co.of India Ltd., Bombay.			
8. m.v. Jag Lata	1973	57793	104754
D. Essar Shipping Ltd.,Bombay			
9. m.v. Nand Shivchand	1982	37813	65000
Total 9 Vessels		543570	990524
Oil Tankers (Crude Carriers)			
A. 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.Gurbachan Singh Salaria PVC	1984	37855	67167
6. m.t. Lance Naik Karam Singh PVC	1985	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.Ardshir 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
22. m.t. Motilal Nehru	1990	51778	85200
		1184490	2145690
B. M/s.Ratnakar Shipping Co.Ltd., Calcutta.			
23. m.t. Ratna Abha	1982	40613	60725
Total 23 Vessels		1225103	2206415
OIL TANKERS (PRODUCT CARRIERS)			
A. 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. Kalandia	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
B. 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.
C. 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
D. M/s.Essar Shipping Ltd., Bombay.			
20. m.t. Nand Ekta	1982	4309	6603
E. 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
F. M/s.Continental Shipping Corpn.Ltd., Bombay.			
25. m.t. Continental Bose (Ex.Sunny Crane)	1984	3462	6157
Total 25 Vessels		383779	601513
LPG CARRIERS			
A. The Shipping Corpn. of India Ltd., Bombay			
1. m.v. Nanga Parbat	1990	17600	17035

SHARE OF TRAFFIC IN PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS DURING 1969-70 TO 1990-91.

(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	14.45	6.44	44.6
	1990-91	14.91	7.22	48.4
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	28.55	18.58	65.1
	1990-91	29.79	19.89	66.8
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	9.72	40.6
	1990-91	24.52	9.81	40.0
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	7.13	5.59	78.4
	1990-91	7.32	5.77	78.8
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	14.36	75.9
	1990-91	19.69	15.06	76.5

SHARE OF TRAFFIC IN PETROLEUM PRODUCTS IN THE TOTAL TRAFFIC HANDLED AT MAJOR PORTS DURING 1969-70 TO 1990-91.

(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	32.3
	1990-91	19.42	5.60	28.8
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
	1990-91	14.90	1.36	9.1
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	-	-
	1990-91	6.88	-	-
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
	1990-91	5.08	0.47	9.3
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
	1990-91	8.03	0.61	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	148.14	63.60	42.9
	1990-91	152.55	65.79	43.1

SOURCE: Ministry of Transport, Indian Port Association.

NOTE : Trafic Handled Includes Transhipment Cargo.

* = Kandla Pol traffic includes traffic handled at vadinar

MOVEMENT OF POL TRAFFIC ON RAILWAYS SINCE 1970-71

Y E A R	Tonnes Originating ('000'MTS)	Earnings ('000'Rs.)	Average Lead (Kms)	Earning (Paise/ Tonnes Kms)	Average freight Col 3 Divided Col 2 Rs/Tonnes.
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
1977-78	13062	1120693	631	13.6	85.80
1978-79	14301	1324332	698	13.3	92.60
1979-80	14266	1497510	729	14.4	104.97
1980-81	14954	1835693	780	15.7	122.76
1981-82	16555	2848050	731	23.5	172.04
1982-83	17342	3588169	647	32.0	206.91
1983-84	17949	4052635	597	37.8	225.79
1984-85	18169	4157626	563	40.6	228.83
1985-86	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
1989-90	24310	1935273	645	58.3	375.78
1990-91 (P)	24980	9620000	605	63.5	385.11

SOURCE : Railway Board. (P) : Provisional

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	1.10.90	1.6.82	1.6.83	1.6.84	15.4.85	11.12.86	1.4.88	1.4.89	1.4.90	1.10.90
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
100	71.4	78.0	78.0	84.3	89.4	99.2	106.1	109.10	53.5	59.2	63.9	63.9	69.1	78.5	87.2	93.3	95.9
300	143.3	175.2	175.2	203.4	215.6	239.3	256.1	263.20	106.3	130.5	141.7	141.7	164.5	188.5	208.7	223.3	229.6
500	207.6	267.0	267.0	326.6	346.2	384.3	411.2	422.70	153.5	197.8	215.1	215.1	263.2	301.4	334.5	357.9	368.0
800	357.2	393.9	433.3	522.1	553.4	614.3	567.3	675.70	263.6	290.9	316.6	348.3	419.7	481.0	533.9	571.3	587.3
1000	425.5	478.5	526.4	639.6	678.0	752.6	805.3	827.90	313.5	352.9	384.3	422.7	513.6	588.9	653.7	699.5	719.1
1500	584.4	655.5	721.1	814.6	969.5	1076.1	1151.4	1183.70	430.4	482.7	525.9	578.5	733.7	841.6	934.2	999.6	1027.6
2000	729.2	796.5	876.2	1123.2	1190.6	1321.6	1414.1	1453.80	530.5	586.1	638.7	702.6	900.6	1033.2	1146.8	1227.1	1261.5
2500	828.0	919.5	1011.5	1284.2	1361.8	1511.6	1617.4	1662.80	609.0	676.3	737.1	810.8	1029.8	1181.6	1311.6	1403.4	1442.8

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 1.4.1991

Pipelines	Owned by	Length in KMS	Diametre in Inches/mm
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"
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"
Nawagam to Koyali	ONGC	79.33	450 mm
GGS-I to GGS-XI Kalol	ONGC	4.55	200 mm
IPS of KNK pipeline to IVP of 18"dia Nawagam-Koyali pipeline	ONGC	1.50	350 mm
Lanwa-INSITU project to Lanwa GGS-I	ONGC	4.50	300 mm
Narimanam-Nagapattinam	ONGC	14.00	206.40 mm
Tondiarpet to Madras Refinery	ONGC	5.00	206.40 mm
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"
Kumchai to Bordumsa	OIL	23.00	6"
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"
Total Onshore		3364.26	

Contd...

Crude Oil, Natural Gas & Product Pipelines in India as on 1.4.1991

Pipelines	Owned by	Length (in KMS)	Diametre (in Inches/mm)
1.	2.	3.	4.
II. CRUDE PIPELINES (OFFSHORE)		530.54	
Heera-Uran	ONGC	80.61	24"
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"
BPA-BH-URAN	ONGC	15.97	12"
ICP-BHS	ONGC	8.37	12"
SBM to Nararabet	IOC	5.27	42"
III. GAS PIPELINES (ONSHORE)		2750.71	
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"
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"
Chokari-T point to M/s GIPCO	ONGC	32.19	300 mm
Gandhar GGS to M/s GNFC	ONGC	42.00	450 mm

Contd.....

Crude Oil, Natural Gas & Product Pipelines in India as on 1.4.1991

Pipelines	Owned by	Length (in KMS)	Diametre (in Inches/mm)
1.	2.	3.	4.
Kalol GGS-I to GGS-XI	ONGC	4.55	200 mm
Kalol GGS-I to XI	ONGC	4.55	100 mm
Kalol-CTF to tap-off point Chankheda from T-connection at Ranasan to AE Co.	ONGC	35.20	200 mm
Kalol GGS-I to Kalol GCS cum CTF	ONGC	5.00	300 mm
GSS to GCS	ONGC	11.00	350 mm
Bharuch City Gas line	ONGC	5.00	100 mm
ND Gas pipeline for M/s GACL	ONGC	5.00	100 mm
Galeki GGS-II to DJP	ONGC	18.00	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"
Auraiya-NTPC Auraiya	GAIL	2.00	12"
Hazira-HTPC Kawas	GAIL	8.00	12"
Vagodia-IPCL Baroda	GAIL	32.00	18"
Ghaziabad Spur II of HBJ	GAIL	10.00	6/4
IV. GAS PIPELINES (OFFSHORE)		566.91	
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"
Heera-Uran	ONGC	80.93	26"
Total Gas Pipelines (III+IV)		3317.62	
V. PRODUCT PIPELINES			
Gauhati-Siliguri	IOC	435.00	8-5/8"
Digboi-Tinsukia (WOL)	IOC (AOD)	35.48	8-5/8"
Digboi-Tinsukia (BOL)	IOC (AOD)	38.95	6"
Digboi-Tinsukia (ROL-1) *	IOC (AOD)	33.72	6"
Koyali-Ahmedabad	IOC	115.70	8-5/8"
Barauni-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-Jallandhar	IOC	164.00	12-3/4"
Eranakulam Ins. to FACT:Alwaye	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"

contd...

Crude Oil, Natural Gas & Product Pipelines in India as on 1.4.1991

Pipelines	Owned by	Length (in KMS)	Diametre (in Inches/mm)
1.	2.	3.	4.
Brijwasan to Palam Airport, Delhi	BPCL	4.00	8"
BPCL(R) to IOC Sewree Installation	BPCL	4.00	12"
BPCL(R) to Pir Pau Jetty	BPCL	2.70	8"/12"
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 Pir Pau Jetty	BPCL	1.00	10"
Uran (ONGC) to Uran (BPCL)	BPCL	7.00	8"
Total Product Pipeline		2684.94	
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)		9945.36	

* Presently not in operation, due to leakages/damages on the line.

XVII. MARKETING NET WORK

Retail outlets in India as on Ist January of each year

(Numbers)

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
1991	Nos.	3907	3910		5542	1258	276	14893
	%	26.2	26.3		37.2	8.4	1.9	100

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

STATE-WISE NUMBER OF RETAIL OUTLETS, MPDC's,LDO/SKO DEALERS AND LPG DISTRIBUTORS AS ON 1.4.1991

(Numbers)

State/Union Territories	Retail outlets	MPDC	LDO/SKO dealers	LPG distributors
1.	2.	3.	4.	5.
STATES				
1. Andhra Pradesh	1191	20	599	337
2. Arunachal Pradesh	26	2	28	12
3. Assam	322	1	339	108
4. Bihar	908	21	381	141
5. Goa	65	1	17	28
6. Gujarat	964	13	455	292
7. Haryana	491	20	137	117
8. Himachal Pradesh	76	1	24	34
9. Jammu & Kashmir	115	1	30	55
10. Karnataka	925	4	301	234
11. Kerala	698	1	233	167
12. Madhya Pradesh	869	18	345	214
13. Maharashtra	1519	16	650	540
14. Manipur	28	3	34	9
15. Meghalaya	48	-	35	13
16. Mizoram	12	1	15	10
17. Nagaland	26	1	17	14
18. Orissa	325	7	167	80
19. Punjab	946	17	230	162
20. Rajasthan	891	28	234	158
21. Sikkim	9	-	8	2
22. Tamil Nadu	1401	-	454	305
23. Tripura	29	1	39	10
24. Uttar Pradesh	1887	72	649	427
25. West Bengal	998	16	430	218
UNION TERRITORIES:				
26. A.N.Islands	3	-	1	1
27. Chandigarh	19	-	11	26
28. D.N.Haveli	3	-	1	1
29. Delhi	234	1	93	207
30. Daman & Diu	4	-	5	2
31. Pondicherry	25	-	8	5
32. Lakshdweep	-	-	-	1
33. Bhutan	12	-	2	-
GRAND TOTAL	15069	266	5972	3930

STATE-WISE NUMBER OF LPG DOMESTIC CUSTOMERS AS ON 1.4.1991

('000' Numbers)

STATE/UTS	BPCL	HPCL	IOC	AOD	TOTAL
STATES					
1. Andhra Pradesh	182.7	690.0	488.3	--	1361.0
2. Arunachal Pradesh	--	--	3.7	7.0	10.7
3. Assam	--	--	108.8	136.9	245.7
4. Bihar	23.9	57.0	411.9	--	492.8
5. Goa	46.3	70.0	0.7	--	117.0
6. Gujarat	318.8	318.0	990.9	--	1627.7
7. Haryana	126.2	61.0	297.8	--	485.0
8. Himachal Pradesh	1.7	17.0	91.2	--	109.9
9. Jammu & Kashmir	12.2	97.0	48.4	--	157.6
10. Karnataka	172.5	374.0	294.8	--	841.3
11. Kerala	119.4	60.0	348.8	--	528.2
12. Madhya Pradesh	137.5	278.0	534.2	--	949.7
13. Maharashtra	1523.8	1390.0	131.9	--	3045.7
14. Manipur	--	--	9.4	22.4	31.8
15. Meghalaya	--	--	9.9	11.9	21.8
16. Mizoram	--	--	6.9	9.0	15.9
17. Nagaland	--	--	7.4	11.0	18.4
18. Orissa	7.9	107.0	94.2	--	209.1
19. Punjab	137.3	78.0	410.7	--	626.0
20. Rajasthan	131.1	157.0	295.0	--	583.1
21. Sikkim	--	--	5.6	--	5.6
22. Tamil Nadu	214.0	148.0	1059.9	--	1421.9
23. Tripura	--	--	11.0	12.1	23.1
24. Uttar Pradesh	317.7	147.0	1368.8	--	1833.5
25. West Bengal	41.4	185.0	617.2	--	843.6
UNION TERRITORIES:					
1. Andaman & Nicobar Islands	--	--	4.0	--	4.0
2. Chandigarh	9.1	29.0	87.8	--	125.9
3. D.N.Haveli	--	3.0	--	--	3.0
4. Delhi	238.2	158.0	813.7	--	1209.9
5. Daman & Diu	--	7.0	--	--	7.0
6. Lakshadweep	--	--	0.2	--	0.2
7. Pondicherry	3.5	4.0	21.0	--	28.5
TOTAL	3765.2	4435.0	8574.1	210.3	16984.6

XVIII. ENERGY

GROSS PRODUCTION OF ENERGY BY VARIOUS SOURCES IN INDIA

Year	Coal & Lignite			Hydro-carbon			Power Million (Kwh)			
	Coal (Million Tonnes)	Lignite (Million Tonnes)	Total	Natural Gas (MM3)	Crude Petroleum ('000' Tonnes)	Petroleum Products ('000' Tonnes)	Thermal	Hydel	Nuclear	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	194.57	12.40	206.97	13217	32040	49505	157510	57790	5820	221120
1989-90	200.89	12.80	213.69	16989	34087	53505	178520	61970	4620	245110
1991-91*	211.93	11.76	223.49	17998	33021	51280	186450	71540	6240	264230

* = 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	Household	Industry	Sector Consumption 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.

XIX - 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

INTERNATIONAL PETROLEUM STATISTICS

XX INTERNATIONAL PETROLEUM STATISTICS

World Proved reserves of Oil and Natural Gas at End 1990

Country	Crude oil			Natural Gas		
	Reserves (Billion 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	7.5	6.3	12.6
U.S.A.	4.3	3.4	10.3	4.7	4.0	9.5
Canada	1.0	0.8	10.9	2.8	2.3	28.3
Latin America	17.1	11.9	45.7	7.0	5.7	75.8
Argentina	0.3	0.2	14.0	0.8	0.6	31.6
Brazil	0.3	0.3	10.4	---	---	---
Ecuador	0.2	0.1	13.9	0.1	0.1	*
Mexico	7.3	5.2	49.9	2.1	1.7	76.3
Venezuela	8.5	5.8	71.0	3.0	2.5	*
Others	0.5	0.3	12.3	1.0	0.8	57.0
Western Europe	1.9	1.5	9.6	5.0	4.1	28.3
Norway	1.0	0.8	12.2	1.7	1.4	61.8
United Kingdom	0.5	0.4	5.6	0.6	0.5	12.3
Others	0.4	0.3	14.8	2.7	2.3	26.5
USSR & Central Europe	8.1	5.8	13.7	45.8	38.5	53.3
U.S.S.R.	7.8	5.6	13.6	45.3	38.0	55.8
Central Europe	0.3	0.2	13.9	0.5	0.5	11.1
Middle East	89.5	65.6	*	37.6	31.5	*
Abu Dhabi	12.1	9.1	*	5.2	4.3	*
Dubai & N.Emirates	0.8	0.6	36.6	0.5	0.4	*
Iran	12.7	9.2	81.6	17.0	14.3	*
Iraq	13.4	9.9	*	2.7	2.3	*
Kuwait	13.0	9.4	*	1.4	1.2	*
Neutral Zone	0.7	0.5	50.0	0.3	0.2	*
Oman	0.6	0.4	18.0	---	---	---
Qatar	0.6	0.4	27.8	4.6	3.9	*
Saudi Arabia	35.0	25.5	*	5.1	4.3	*
Yeman	0.4	0.4	43.3	---	---	---
Syria	0.2	0.2	12.2	---	---	---
Others	+	---	6.2	0.8	0.7	*
Africa	7.9	6.0	26.5	8.1	6.7	*
Algeria	1.2	0.9	21.8	3.2	2.7	68.8
Angola	0.3	0.2	12.2	---	---	---
Egypt	0.6	0.4	13.7	0.4	0.3	43.3
Gabon	0.1	0.1	8.0	+	+	*
Libya	3.0	2.3	46.5	1.2	1.0	*
Nigeria	2.3	1.7	27.1	2.5	2.1	*
Tunisia	0.2	0.2	49.5	---	---	---
Others	0.2	0.2	24.4	0.8	0.6	*
Asia & Australasia	6.7	5.0	20.8	8.4	7.2	58.2
Japan	+	-	12.2	+	+	19.4
Brunei	0.2	0.1	25.7	0.3	0.3	40.1
China	3.2	2.4	22.7	1.0	0.8	68.0
Indonesia	1.5	1.1	20.5	2.6	2.2	57.3
Malaysia	0.4	0.3	12.5	1.6	1.4	83.6
Other Asia	0.1	0.1	27.7	1.7	1.4	57.3
India	1.1	0.8	31.4	0.7	0.6	53.4
Australia	0.2	0.2	7.2	0.4	0.4	21.1
New Zealand	+	-	15.9	0.1	0.1	25.4
TOTAL WORLD	136.5	100.0	43.4	119.4	100.0	58.2
ofwhich OECD& LDC's	125.1	91.8	51.7	66.9	60.7	61.8

*Over 100 years. +Less than 0.05.

Source: BP Statistical review of World Energy June 1991.

WORLD ESTIMATED CRUDE OIL PRODUCTION 1981-1990

(Million Tonnes)

Country	1981	1983	1985	1987	1988	1989	1990	% age change 1990 over 1989.	% age share of Total 1990
1	2	3	4	5	6	7	8	9	10
North America									
USA	482.8	486.8	500.8	471.3	461.9	433.0	417.6	-3.5	13.2
Canada	75.9	79.0	86.2	90.9	95.5	92.5	93.3	+0.7	3.0
Total N.America	558.7	565.8	587.0	562.2	557.4	525.5	510.9	-2.8	16.2
Latin America									
Argentina	25.5	24.9	24.0	22.3	23.5	22.9	23.3	+1.9	0.7
Brazil	10.7	17.6	28.1	29.6	31.0	30.9	32.7	+6.0	1.0
Colombia	6.8	7.9	8.9	19.6	19.3	20.1	21.8	+8.6	0.7
Ecuador	10.3	11.6	13.5	8.8	15.0	14.5	13.7	-5.6	0.4
Mexico	128.3	146.6	149.7	141.8	140.6	142.1	145.3	+2.2	4.6
Trinidad	10.0	8.2	8.7	8.3	7.5	7.4	7.4	-0.5	0.2
Venezuela	112.5	97.0	87.6	89.0	96.2	100.9	119.4	+18.3	3.8
Others	13.6	13.0	13.6	12.0	10.6	10.2	10.1	-1.2	0.3
Total Latin America	317.7	326.8	334.1	331.4	343.7	349.0	373.7	+7.1	11.7
Western Europe									
Austria	1.4	1.3	1.2	1.1	1.2	1.2	1.2	+0.2	+
Denmark	0.7	2.2	2.9	4.6	4.7	5.5	5.9	+8.1	0.2
France	1.7	2.4	3.3	3.7	3.7	3.6	3.4	-6.9	0.1
Germany	4.5	4.2	4.1	3.8	4.0	4.0	3.9	-2.8	0.1
Italy	1.5	2.2	2.4	3.9	4.8	4.6	4.6	+0.5	0.2
Norway	24.9	32.0	40.3	49.1	56.7	74.9	81.8	+9.3	2.6
Turkey	2.4	2.2	2.1	2.6	2.6	2.8	3.7	+29.2	0.1
United Kingdom	89.4	114.9	128.2	123.3	114.4	91.8	91.6	-0.2	2.9
Others	3.0	7.2	7.6	7.5	6.9	5.8	5.8	+0.2	0.2
Total W.Europe	129.5	168.4	192.1	199.6	199.0	194.2	201.9	+4.0	6.4
USSR & Central Europe									
USSR	609.0	616.3	595.0	624.2	624.0	607.0	570.0	-6.1	18.1
Central Europe	21.5	23.1	21.7	21.0	20.7	20.1	14.9	-25.7	0.5
Total USSR & C Europe	630.5	639.4	616.7	645.2	644.7	627.1	584.9	-6.7	18.6
Middle East									
Abu Dhabi	54.5	39.3	41.6	56.1	60.0	73.6	87.3	+18.5	2.8
Dubai & N.Emirates	18.3	17.2	22.5	24.3	24.2	23.2	21.9	-5.8	0.7
Iran	65.8	122.4	110.0	114.7	112.5	141.5	155.3	+9.8	4.9
Iraq	44.0	54.1	70.6	102.4	127.4	138.6	98.2	-29.2	3.1
Kuwait	48.2	44.7	45.7	53.5	66.6	81.1	52.7	-35.0	1.7
Neutral Zone	19.5	16.2	16.9	20.2	16.6	19.3	14.3	-25.7	0.5
Oman	16.4	19.6	25.4	29.1	29.8	29.4	32.9	+11.8	1.0
Qatar	20.2	14.7	15.9	15.9	16.9	19.3	21.2	+10.1	0.7
Saudi Arabia	491.3	255.8	173.1	212.2	256.5	257.3	327.1	+27.1	10.4
Others	11.1	11.6	11.6	14.9	25.2	29.1	32.4	+11.4	1.0
Total Middle East	789.3	595.6	533.3	643.3	735.7	812.4	843.3	+3.8	26.8
Africa									
Algeria	46.3	42.9	47.7	48.9	47.2	51.5	54.8	+6.4	1.9
Angola	7.1	8.1	11.8	17.9	23.1	23.1	24.1	+4.0	0.8
Egypt	34.1	35.7	45.3	45.9	44.0	44.5	45.5	+2.3	1.4
Gabon	7.6	7.8	7.7	7.8	8.7	10.6	12.4	+17.6	0.4
Libya	58.6	53.0	52.7	47.9	50.6	55.5	64.7	+16.6	2.1
Nigeria	71.0	61.0	72.9	63.7	67.6	80.6	89.3	+10.8	2.8
Other Africa	14.9	18.5	22.0	21.7	22.7	22.8	22.7	-0.3	0.7
Total Africa	239.6	227.0	260.1	253.8	263.9	288.6	313.5	+8.6	10.1

Contd...

WORLD ESTIMATED CRUDE OIL PRODUCTION 1981-1990

(Million Tonnes)

Country	1981	1983	1985	1987	1988	1989	1990	%age change 1990 over 1989	%age share of total 1990
1	2	3	4	5	6	7	8	9	10
Asia & Australasia									
Brunei	8.6	8.6	7.4	7.0	7.0	7.0	7.1	+1.6	0.2
China	101.0	106.0	124.9	132.9	137.0	138.3	139.0	+0.5	4.4
India	14.9	25.2	29.9	30.4	31.9	34.2	33.9	-0.9	1.1
Indonesia	82.2	65.3	63.9	63.3	63.8	67.9	73.0	+7.5	2.3
Japan	0.4	0.4	0.5	0.6	0.6	0.6	0.7	+27.3	+
Malaysia	12.4	20.2	21.3	24.6	26.7	28.8	30.6	+6.3	1.0
Other Asia	2.6	3.3	4.8	5.9	5.1	5.4	5.9	+9.3	0.2
Australasia	19.0	21.8	29.6	28.8	27.9	26.5	30.5	+15.0	1.0
Total Asia & Australasia.	241.1	250.8	282.3	293.5	300.0	308.7	320.7	+3.9	10.2
TOTAL WORLD	2906.4	2773.8	2805.6	2929.0	3044.4	3105.5	3148.9	+1.4	100.0
Of which OECD & LDCs	2174.6	2027.7	2063.2	2149.9	2262.0	2339.4	2424.3	+3.6	77.0
of which OPEC	1150.4	903.0	842.3	928.7	1029.8	1135.4	1205.4	+6.2	38.2

* Includes crude oil, shale 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 such as coal derivatives. + Less than 0.05.

SOURCE: BP Statistical Review of World Energy June 1991.

CRUDE OIL PRODUCTION BY OPEC MEMBER COUNTRIES (1975-1990)

(Million Tonnes)

OPEC Countries	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990(P)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Algeria	48	59	52	46	46	43	46	48	49	49	47	52	55
Ecuador	8	11	10	10	10	12	13	14	14	9	15	15	14
Gabon	11	10	9	8	8	8	8	8	8	8	9	11	12
Indonesia	65	79	78	82	69	65	69	64	67	63	64	68	73
Iran	268	158	74	66	120	122	109	110	95	115	113	142	155
Iraq	111	171	130	44	50	54	60	71	85	102	127	139	98
Kuwait	94	113	72	48	35	45	49	46	62	54	67	81	53
Libya	71	101	88	59	55	53	53	53	50	48	51	56	65
Nigeria	89	114	102	71	64	61	69	73	72	64	68	81	89
Qatar	21	25	22	20	16	15	20	16	17	16	17	19	21
Saudi Arabia	344	470	493	491	328	256	233	173	251	212	257	257	327
U.A.E.	107	117	112	92	75	72	78	78	91	100	99	113	124
Venezuela	125	125	116	113	101	97	98	88	93	89	96	101	119
Total	1362	1553	1358	1150	977	903	905	842	954	929	1030	1135	1205

(P) = Provisional.

Source : BP Statistical Review of World Energy June 1991.

WORLD PRODUCTION OF NATURAL GAS 1981-1990*

(Million Tonnes Oil equivalent)

Country	1981	1985	1987	1988	1989	1990 (P)	% change 1990 over 1989	% share of total 1990
1	2	3	4	5	6	7	8	9
North America								
USA	492.5	422.7	426.2	436.9	439.7	443.8	+0.9	25.2
Canada	67.4	68.9	70.7	81.7	87.0	88.0	+1.1	5.0
Total N. America	559.9	491.6	496.9	518.6	526.7	531.8	+0.9	30.2
Latin America								
Argentina	7.5	12.7	16.8	19.3	21.8	21.8	+0.1	1.2
Bolivia	2.3	2.2	2.4	2.5	2.6	2.7	+2.2	0.2
Colombia	2.6	3.7	3.7	4.4	4.3	3.6	-17.1	0.2
Mexico	23.3	25.3	23.7	23.5	23.8	24.3	+1.9	1.4
Trinidad	2.2	2.9	3.5	4.0	3.9	3.7	-3.3	F12
Venezuela	15.0	15.6	16.7	16.9	16.8	19.5	+16.4	1.1
Others	3.0	5.7	5.9	6.0	5.6	5.8	+3.2	0.3
Total Latin America	55.9	68.1	72.7	76.6	78.8	81.4	+3.3	4.6
Western Europe								
France	6.6	4.5	3.2	2.6	2.6	2.5	-3.8	0.1
Germany	14.4	12.2	15.1	14.1	13.6	13.4	-1.8	0.8
Italy	11.6	12.4	14.7	14.9	15.3	15.6	+2.1	0.9
Netherlands	67.6	64.4	56.1	49.9	54.1	54.5	+0.7	3.1
Norway	23.5	22.8	26.7	26.8	27.7	25.0	-9.6	1.4
United Kingdom	31.9	37.1	40.8	39.3	38.3	40.9	+6.8	2.3
Others	2.2	4.1	4.5	5.0	5.8	5.8	-0.5	0.3
Total W.Europe	157.8	157.5	161.1	152.6	157.4	157.7	+0.2	8.9
USSR & Central Europe								
USSR	389.7	531.7	586.3	619.7	640.6	655.9	+2.4	37.2
Central Europe	40.6	44.9	44.4	40.2	38.4	38.4	-	2.2
Total USSR & C Europe	430.3	576.6	630.7	659.9	679.0	694.3	+2.3	39.4
Middle East								
Abu Dhabi	6.5	11.0	14.3	14.7	16.7	18.3	+9.5	1.0
Iran	6.5	13.1	14.4	18.0	19.5	21.5	+10.5	1.2
Kuwait	4.8	3.8	4.3	5.8	7.3	4.9	-33.7	0.3
Saudi Arabia	14.7	16.9	24.1	26.2	26.8	27.5	+ 2.4	1.6
Others	8.4	12.0	16.6	20.4	21.7	20.9	- 3.6	1.2
Total Middle East	40.9	56.8	73.7	85.1	92.0	93.1	+ 1.1	5.3
Africa								
Algeria	22.1	30.9	35.6	37.5	40.2	42.5	+5.8	2.4
Egypt	-	0.2	0.2	0.2	0.3	0.3	+4.8	+
Libya	3.6	4.7	6.0	5.1	5.4	6.0	+10.9	0.3
Nigeria	1.6	1.3	3.3	3.4	3.9	3.8	-1.9	0.2
Others	1.8	5.5	6.3	6.8	7.5	8.0	+5.7	0.5
Total Africa	29.1	42.6	51.4	53.0	57.3	60.6	+5.7	3.4
Asia & Australasia								
China	11.6	11.5	12.5	12.6	12.9	13.2	+2.8	0.8
Japan	1.9	2.0	2.0	1.9	1.9	1.5	-22.6	0.1
Indonesia	17.3	27.3	32.9	34.2	39.9	40.7	+2.0	2.3
Malaysia	-	9.2	14.0	14.8	16.8	17.3	+3.0	1.0
Other E.Asia	8.4	12.2	12.9	14.3	14.3	14.3	-0.5	0.8
Pakistan	6.1	9.3	10.7	11.3	11.2	11.5	+2.5	0.7
Other South Asia	6.6	12.9	15.3	17.3	19.0	21.5	+13.1	1.2
of which India	3.5	7.9	10.9	12.8	15.9	18.0	+13.2	1.0
Australasia	11.9	15.3	17.3	18.0	20.1	22.7	+13.0	1.3
Total Asia & Austra.	63.8	99.7	117.6	124.4	136.1	142.7	+4.8	8.2
TOTAL WORLD	1337.7	1492.9	1604.1	1670.2	1727.3	1761.6	+2.0	100.0
Of which OECD & LDCs	896.1	904.9	961.0	997.8	1035.8	1054.1	+1.8	59.8

* = Excluding gas flared or recycled. P = Provisional. + : Less than 0.05

SOURCE:BP Statistical Review of World Energy June '91. Note:Figures for India Inserted.

WORLD CONSUMPTION OF NATURAL GAS 1981-1990*

(Million Tonnes Oil equivalent)

Country	1981	1985	1987	1988	1989	1990 (p)	% Change 1990 over 1989	% share of Total 1990
1.	2.	3.	4.	5.	6.	7.	8.	9.
North America								
USA	498.2	445.9	443.6	463.8	487.7	490.5	+ 0.6	28.2
Canada	47.8	44.8	41.2	52.8	57.5	55.0	- 4.3	3.2
Total N.America	546.0	490.7	484.8	516.6	545.2	545.5	+ 0.1	31.4
Latin America								
Total Latin America	55.8	70.3	74.1	75.7	74.2	78.9	+ 6.4	4.5
Western Europe								
Austria	3.9	4.5	4.6	4.4	4.7	5.0	+ 7.7	0.3
Belgium & Luxembourg	9.5	8.4	8.5	8.4	9.4	8.3	-11.8	0.5
Denmark	-	0.6	1.3	1.6	1.7	1.9	+ 8.6	0.1
Finland	0.6	0.8	1.4	1.4	1.9	2.3	+17.3	0.1
France	24.5	23.3	25.0	23.6	24.4	25.1	+ 2.9	1.4
Germany	49.4	49.1	53.2	52.4	53.5	53.2	- 0.7	3.1
Greece	-	0.1	0.1	0.1	0.1	0.1	- 4.4	+
Iceland	-	-	-	-	-	-	-	-
Republic of Ireland	0.9	1.8	1.0	1.2	1.5	1.4	- 6.9	0.1
Italy	22.8	27.2	32.2	34.1	36.9	39.3	+ 6.5	2.3
Netherlands	30.0	32.5	33.6	30.6	31.3	30.4	- 2.9	1.7
Norway	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-
Spain	2.1	2.1	2.7	3.5	4.5	5.0	+11.8	0.3
Sweden	-	0.1	0.3	0.4	0.4	0.6	+45.3	+
Switzerland	0.8	1.0	0.9	1.1	1.3	1.3	+ 4.2	0.1
Turkey	-	-	0.2	0.3	0.3	0.3	+22.0	+
United Kingdom	42.4	48.4	50.5	47.9	47.4	48.8	+ 3.0	2.8
Total W.Europe	186.9	199.9	215.5	211.0	219.3	223.0	+ 1.7	12.8
USSR & Central Europe								
USSR	335.1	463.6	516.5	548.9	557.8	568.0	+ 1.8	32.7
Central Europe	57.9	67.6	71.3	67.9	72.2	68.5	- 5.1	3.9
Total USSR & C.Europe	393.0	531.2	587.8	616.8	630.0	636.5	+ 1.0	36.6
Cyprus/Gibraltar/Malta	-	-	-	-	-	-	-	-
Middle East								
Total Middle East	36.8	51.0	69.0	80.4	85.0	89.6	+ 5.4	5.2
Africa								
Total Africa	21.3	26.5	27.9	29.3	31.2	32.9	+ 5.4	1.9
Asia								
China	10.4	11.5	12.8	12.7	12.9	13.2	+ 2.3	0.8
Indonesia	3.1	5.4	5.8	6.0	6.8	7.7	+14.1	0.4
Japan	24.2	35.9	37.8	39.6	42.2	45.4	+ 7.4	2.6
Malaysia	0.3	2.4	4.8	5.6	6.7	7.4	+10.7	0.4
Philippines	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-
South Korea	-	-	2.1	2.7	2.6	2.9	+10.7	0.2
Taiwan	1.3	1.0	0.9	1.0	1.0	1.3	+29.1	0.1
Thailand	0.3	2.6	3.5	5.2	4.6	5.6	+21.7	0.3
Other Asia	10.8	15.0	18.8	20.5	25.1	27.6	+10.0	1.6
of which India	2.4	5.4	10.9	10.1	11.8	14.4	+22.0	0.8
Total Asia	50.4	73.8	86.5	93.3	101.9	111.1	+ 9.2	6.4
Australasia								
Australia	10.6	12.4	14.0	14.3	15.7	16.5	+ 5.2	1.0
New Zealand	1.0	3.3	3.8	4.2	4.0	4.1	+ 4.0	0.2
Total Australasia	11.6	15.7	17.8	18.5	19.7	20.6	+ 4.9	1.2
TOTAL WORLD	1301.8	1459.1	1563.4	1641.6	1706.5	1738.1	+ 2.0	100.0
Of which OECD & LDCs	898.4	916.4	962.8	1012.1	1063.6	1088.4	+ 2.4	62.6
Of which OECD	768.7	742.2	755.9	785.7	826.4	834.5	+ 1.0	48.0

* Discrepancy between these consumption figures and production statistics includes gas consumed in field operations, material impurities and statistical measurement deviations

\+ Less than 0.05.

Source : BP Statistical Review of World Energy, June 1991.

P : Provisional Note : Figures for India Inserted.

PRODUCTIVITY OF PRODUCING WELLS IN SELECTED FIELDS IN OPEC MEMBER COUNTRIES-1989
(AS AT YEAR END)

COUNTRY	Average Depth (Feet)	WELLS			AV-Daily Production (000'bbl)	t/w/d
		Flowing	Pumping	Total		
1.	2.	3.	4.	5.	6.	7.
Algeria	9,052	690	225	915	727	108
Divided Zone	6,831	165	290	455	N.A.	N.A.
Ecuador	9,803	53	812	865	279	44
Gabon	6,755	163	115	278	204	100
Indonesia	3,669	739	5065	5804	1231	29
I.R.Iran	10,529	645	-	645	2814	593
Iraq	5,873	378	-	378.	2786	1002
Kuwait	10,308	343	22	365	1464	545
S.P.Libyan A.J.	8,091	495	565	1060	1129	145
Nigeria	9,472	365	1490	1855	1716	126
Qatar	16,633	168	4	172	320	253
Saudi Arabia	7,313	580	-	580	5065	1188
U.A.E.	9,520	899	248	1147	1858	220
Venezuela	10,575	4805	8321	13126	1747	18
Total OPEC	8,288	10488	17157	27645	21340	105

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

N.A. = Not Available.

Source= OPEC Annual Statistical Bulletin - 1989.

WORLD OIL REFINING CAPACITIES AT END 1981 TO 1990

(Million Tonnes Per Annum)

COUNTRY/AREA.	1981	1984	1985	1986	1987	1988	1989	1990 (P)	% age Change1990 over 1989	% age Share of Total 1990
1	2	3	4	5	6	7	8	9	10	11
North America	1015	880	870	871	874	887	871	866	(-)0.6	23.0
USA	908	780	767	768	772	793	779	773	(-)0.8	20.5
Canada	107	100	103	103	102	94	92	93	1.1	2.5
Latin America	450	403	369	372	376	377	394	395	0.3	10.5
Argentina	34	34	33	33	34	34	34	34	-	0.9
Brazil	76	65	65	65	70	70	73	74	1.4	2.0
Mexico	76	84	89	89	89	88	96	99	3.1	2.6
Netherlands Antil	1.39	37	16	16	16	16	16	16	-	0.4
Trinidad	22	16	13	15	15	15	15	12	(-)20.0	0.3
Venezuela	70	61	61	61	59	60	60	58	(-)3.3	1.6
Others	133	106	92	93	93	94	100	102	2.0	2.7
Western Europe	1000	787	754	738	730	724	706	704	(-)0.3	18.7
Belgium	48	36	36	35	35	35	35	35	-	0.9
France	160	109	108	101	94	90	84	84	-	2.2
Germany	171	132	113	110	108	108	100	101	1.0	2.7
Italy	198	136	128	127	123	117	116	114	(-)1.7	3.0
Netherlands	88	71	68	69	69	69	69	69	-	1.9
Spain	77	72	71	70	70	71	71	70	(-)1.4	1.9
United Kingdom	117	96	93	91	90	91	91	91	-	2.4
Others	141	135	137	135	141	143	140	140	-	3.7
USSR & Cen.Europe	697	719	717	734	736	742	758	758	-	20.2
USSR	576	598	596	609	609	610	610	610	-	16.2
Central Europe	121	121	121	125	127	132	148	148	-	4.0
Middle East	161	175	189	191	207	217	222	251	13.1	6.7
Bahrain	12	13	13	12	13	12	12	12	-	0.3
Iran	31	26	26	26	26	26	26	36	38.5	1.0
Iraq	13	15	16	16	16	16	16	16	-	0.4
Kuwait	26	29	31	31	31	41	41	41	-	1.1
Saudi Arabia	33	43	55	56	68	68	74	92	24.3	2.5
Others	46	49	48	50	53	54	53	54	1.9	1.4
Africa	101	126	127	126	131	140	141	143	1.4	3.8
Asia & Australasia	630	639	637	632	626	623	628	644	2.5	17.1
China	90	107	107	108	111	117	123	123	-	3.2
Indonesia	25	38	39	39	39	39	39	39	-	1.0
Japan	282	248	247	233	227	217	209	218	4.3	5.8
Singapore	51	51	51	48	43	46	50	52	4.0	1.4
South Asia	44	49	57	61	64	64	65	67	3.1	1.8
Of which India*	31.8	37.8	37.8	45.6	46.7	48.7	51.8	51.8	-	1.4
Other Asia	98	107	101	106	106	103	105	108	2.9	2.9
Australasia	40	39	35	37	36	37	37	37	-	1.0
TOTAL WORLD	4054	3729	3663	3664	3680	3710	3720	3761	1.1	100.0

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

SOURCE: BP Statistical review of World Energy, June 1991.

WORLD REFINERY CRUDE THROUGHPUT : 1980 TO 1990.

(Million Tonnes Per Annum)

COUNTRY/AREA.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	%age change 1990 over 1989	%Share of total 1990
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
U.S.A.	673	619	585	580	599	596	631	638	669	673	675	0.3	22.7
Canada	95	88	75	72	73	71	69	73	76	77	79	2.6	2.7
Latin America	328	333	308	296	291	277	279	281	278	285	291	2.1	9.8
Western Europe	635	565	522	504	510	494	522	515	534	534	551	3.2	18.5
Middle East	122	109	112	125	133	139	146	148	156	168	163	-3.0	5.5
Africa	73	76	86	95	98	100	104	108	110	113	116	2.7	3.9
China	71	69	75	79	88	88	93	97	101	105	106	1.0	3.6
Japan	200	180	167	162	167	155	148	144	149	158	172	8.9	5.8
South Asia	35	39	42	44	44	51	56	57	58	61	62	1.6	2.1
Of which India	25	30	32	34	35	41	44	47	48	52	52	-	1.8
Other Asia	119	125	117	120	124	133	139	138	145	155	165	6.5	5.6
Australasia	32	33	31	30	31	29	29	32	34	35	35	-	1.2
USSR & Central Europe	563	606	609	608	597	582	595	597	601	593	552	-6.9	18.6
TOTAL WORLD:	2946	2842	2729	2715	2755	2715	2811	2828	2911	2957	2967	0.3	100.0
Of which OECD & LDCs	2304	2159	2037	2020	2062	2036	2115	2125	2200	2245	2296	2.3	77.4

SOURCE: BP Statistical Review of the World Energy, 1991.
P : Provisional

Country-wise World Oil Consumption 1981-90*

(Million Tonnes)

COUNTRY/AREA.	1981	1985	1986	1987	1988	1989	1990 (P)	%Change 1990 over 1989	%share Of total 1990
1	2	3	4	5	6	7	8	9	10
North America									
USA	746.0	721.7	751.3	767.3	793.4	794.9	778.9	- 2.0	25.1
Canada	81.7	68.5	68.1	70.2	73.7	76.7	74.8	- 2.5	2.4
Total N.America	827.7	790.2	819.4	837.5	867.1	871.6	853.7	- 2.1	27.5
Latin America									
Total Latin America	223.9	220.8	226.6	236.4	240.9	249.4	254.8	+ 2.2	8.2
Western Europe									
Austria	11.0	9.8	10.4	10.7	10.6	10.4	10.7	+ 2.7	0.3
Belgium&Luxembourg	24.5	20.8	23.5	23.7	24.4	24.4	24.1	- 1.1	0.8
Denmark	12.8	10.7	10.5	9.6	9.5	9.1	8.8	- 2.4	0.3
Finland	12.3	10.8	11.3	11.2	11.0	11.0	10.9	- 0.7	0.3
France	99.0	84.3	86.0	86.6	86.0	88.4	88.7	+ 0.3	2.9
Germany	133.1	128.9	135.0	129.3	129.7	121.8	126.2	+ 3.6	4.0
Greece	11.9	12.0	12.2	13.2	13.7	15.0	14.5	- 2.8	0.5
Iceland	0.5	0.5	0.5	0.6	0.6	0.7	0.7	+ 3.2	+
Republic of Ireland	5.1	4.0	4.8	4.1	3.9	4.0	4.4	+10.3	0.1
Italy	95.7	84.4	86.5	90.1	91.7	93.8	92.3	- 1.6	3.0
Netherlands	35.7	29.2	32.4	32.4	34.5	33.9	34.2	+ 0.9	1.1
Norway	8.7	9.0	9.3	9.7	9.2	9.0	9.2	+ 2.6	0.3
Portugal	8.8	8.8	9.5	8.9	8.7	11.3	11.0	- 2.5	0.4
Spain	50.4	42.9	42.7	43.8	44.7	46.7	48.1	+ 3.1	1.6
Sweden	22.4	18.3	18.7	17.1	16.3	15.4	15.0	- 2.7	0.5
Switzerland	11.9	12.0	13.2	12.4	12.4	11.9	12.8	+ 7.0	0.4
Turkey	15.4	16.8	18.3	21.0	22.3	22.5	23.8	+ 6.0	0.8
United Kingdom	74.7	77.4	77.4	75.2	79.2	81.7	82.4	+ 0.8	2.7
Total W.Europe	633.9	580.6	602.2	599.6	608.4	611.0	617.8	+ 1.2	20.0
USSR & Cen.Europe									
USSR	452.4	442.4	444.7	444.2	439.1	433.2	402.6	- 7.1	12.9
Central Europe	92.2	87.4	92.3	91.4	91.6	92.1	79.4	-13.8	2.6
TotalUSSR&C Europe	544.6	529.8	537.0	535.6	530.7	525.3	482.0	- 8.2	15.5
Cyprus/Gibraltar/ Malta	1.5	1.8	2.0	2.2	2.5	2.5	2.7	+ 8.1	0.1
Middle East									
Total Middle East	104.9	129.4	127.8	130.1	135.1	138.9	146.3	+ 5.3	4.7
Africa									
Total Africa	73.8	83.0	81.8	85.3	87.8	91.9	93.9	+ 2.2	3.0
Asia									
China	84.8	90.3	100.0	105.3	110.2	114.5	113.4	- 1.0	3.7
Indonesia	21.5	22.0	22.1	24.1	25.2	26.9	30.9	+14.8	1.0
Japan	223.9	206.3	208.5	209.2	224.7	232.9	245.0	+ 5.2	7.9
Malaysia	8.3	9.0	8.7	8.6	9.0	9.5	10.5	+10.7	0.3
Philippines	10.2	7.4	7.8	8.9	9.8	10.9	11.5	+ 4.8	0.4
Singapore	10.9	11.8	13.9	14.2	16.5	18.9	19.5	+ 3.4	0.6
South Korea	24.3	24.7	27.4	29.0	34.7	39.8	48.5	+22.0	1.6
Taiwan	13.5	15.9	18.1	19.0	22.9	25.0	26.2	+ 4.6	0.8
Thailand	11.0	11.0	11.3	12.8	14.5	17.2	19.3	+12.3	0.6
Other Asia	66.4	68.9	71.9	74.0	79.7	84.9	89.4	+ 5.2	2.9
of which India	29.5	41.2	44.9	47.4	47.9	52.0	51.7	- 0.6	1.7
Total Asia :	474.8	467.3	489.7	505.1	547.2	580.5	614.2	+ 5.8	19.8
Australasia									
Australia	29.2	27.0	28.2	28.7	29.9	31.1	31.3	+ 0.7	1.0
New Zealand	4.0	3.8	4.0	4.3	4.4	4.5	4.7	+ 6.4	0.2
Total Australasia	33.2	30.8	32.2	33.0	34.3	35.6	36.0	+ 1.4	1.2
TOTAL WORLD	2918.3	2833.7	2918.7	2964.8	3054.0	3106.7	3101.4	- 0.2	100.0
of whichOECD&LDCs	2270.9	2196.3	2263.9	2305.5	2394.1	2446.9	2485.4	+ 1.6	80.1
of which OECD	1718.7	1607.9	1662.3	1679.3	1734.5	1751.1	1752.5	+ 0.1	56.5

* : 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 1991.

Note : 1 Figure for India Inserted.

2 Difference between world production and consumption are accounted for by stock changes, statistical differences and oil 'Destination not known'.

Product-wise Regional Consumption of Main Petroleum Products During 1981-90

(Million Tonnes)

COUNTRY	1981	1985	1986	1987	1988	1989	1990 (P)	%change 1990 over 1989	%share of total 1990
1	2	3	4	5	6	7	8	9	10
USA									
Gasoline	297.9	305.4	314.3	325.2	333.8	333.0	326.6	- 1.9	41.9
Middle Distillates	199.2	204.8	213.5	218.7	229.7	231.6	229.3	- 1.0	29.4
Fuel Oil	110.6	67.3	78.2	69.2	75.7	74.4	66.5	-10.6	8.5
Others	138.3	144.2	145.3	154.2	154.2	155.9	156.5	+ 0.4	20.2
Total USA	746.0	721.7	751.3	767.3	793.4	794.9	778.9	- 2.0	100.0
Canada									
Gasoline	31.3	27.7	27.3	27.3	26.5	26.8	26.7	- 0.6	35.7
Middle distillates	25.0	22.2	21.6	21.9	23.2	24.1	23.2	- 4.0	31.0
Fuel Oil	11.2	5.6	6.2	6.8	7.4	9.1	9.0	- 0.6	12.1
Others	14.2	13.0	13.0	14.2	16.6	16.7	15.9	- 4.8	21.2
Total Canada	81.7	68.5	68.1	70.2	73.7	76.7	74.8	- 2.5	100.0
Western Europe									
Gasoline	134.4	139.5	146.0	149.1	154.4	155.9	157.5	+ 1.0	25.5
Middle distillates	224.3	228.1	238.8	240.9	243.9	242.1	247.6	+ 2.3	40.1
Fuel Oil	182.8	120.6	121.4	114.1	109.5	110.9	109.2	- 1.6	17.7
Others	92.4	92.4	96.0	95.5	100.6	102.1	103.5	+ 1.7	16.7
Total W. Europe	633.9	580.6	602.2	599.6	608.4	611.0	617.8	+ 1.2	100.0
Japan									
Gasoline	39.8	41.5	43.1	44.4	46.7	49.4	51.8	+ 4.9	21.2
Middle distillates	60.6	63.6	66.6	69.5	76.8	79.2	84.9	+ 7.2	34.6
Fuel Oil	91.2	62.4	59.2	56.9	61.8	62.9	65.1	+ 3.4	26.6
Others	32.3	38.8	39.6	38.4	39.4	41.4	43.2	+ 4.6	17.6
Total Japan	223.9	206.3	208.5	209.2	224.7	232.9	245.0	+ 5.2	100.0
Australasia									
Gasoline	13.1	13.5	13.4	13.5	14.0	14.5	14.4	- 0.3	40.1
Middle distillates	9.8	10.4	10.9	11.5	12.1	12.6	13.0	+ 2.8	36.0
Fuel Oil	5.6	2.9	2.6	2.5	2.5	2.7	2.5	- 6.2	6.9
Others	4.7	4.0	5.3	5.5	5.7	5.8	6.1	+ 5.2	17.0
Total Australasia	33.2	30.8	32.2	33.0	34.3	35.6	36.0	+ 1.4	100.0
LDCs									
Gasoline	99.8	111.5	112.3	115.3	120.3	127.5	136.4	+ 7.0	18.6
Middle distillates	191.7	225.8	229.0	240.8	254.0	270.6	283.4	+ 4.8	38.7
Fuel Oil	184.6	164.4	168.4	170.7	179.5	188.7	199.2	+ 5.6	27.2
Others	76.1	86.7	91.9	99.3	105.8	109.0	113.9	+ 4.5	15.5
Total LDCs	552.2	588.4	601.6	626.1	659.6	695.8	732.9	+ 5.3	100.0
OECD & LDCs									
Gasoline	616.3	639.1	656.4	674.8	695.7	707.1	713.4	+ 0.9	28.7
Middle distillates	710.7	754.9	780.4	803.3	839.7	860.2	881.4	+ 2.5	35.5
Fuel Oil	586.0	423.2	436.0	420.2	436.4	448.7	451.5	+ 0.6	18.2
Others	357.9	379.1	391.1	407.2	422.3	430.9	439.1	+ 2.0	17.6
Total OECD & LDCs	2270.9	2196.3	2263.9	2305.5	2394.1	2446.9	2485.4	+ 1.6	100.0

Note: 'Gasolines' consists of aviation and motor gasolines and LDF (light distillate feedstock). 'Middle distillates' consists of jet and heating kerosenes 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.

P = Provisional

Source: BP Statistical Review of World Energy, June 1991.

OECD members

Europe: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Republic of Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom.

Other member countries: Australia, Canada, Japan, New Zealand, USA.

LDCs

Non-OECD countries exchuding USSR. Cambodia, China, Central Europe, Cuba, Laos, Mongolia, North Korea and Vietnam.

OECD & LDCs

Equivalent to 'Non-Communist World' (NCW) grouping of previous Reviews.

WORLD OIL PRODUCTION, CONSUMPTION AND RELATIVE DEFICIT/SURPLUS IN EACH REGION/COUNTRY DURING 1990 & 1980.

(Million Tonnes)

COUNTRY/REGION	1990(P)				1980			
	Production	Consumption	Deficit Surplus	% extent of dependence.	Production	Consumption	Deficit Surplus	% extent of dependence.
1.	2.	3.	4.	5.	6.	7.	8.	9.
North America (Including Canada)	510.9	853.7	- 342.8	- 40.2	567.6	881.7	- 314.1	- 35.6
Latin America	373.7	254.8	+ 118.9	+ 46.7	298.6	222.8	+ 75.8	+ 34.0
Western Europe	201.9	617.8	- 415.9	- 67.3	121.5	681.1	- 559.6	- 82.2
Middle East	843.3	146.3	+ 697.0	+476.4	927.4	99.8	+ 827.6	829.3
Africa	313.5	93.9	+ 219.6	+233.9	301.7	70.4	+ 231.3	328.6
Asia	290.2	614.2	- 324.0	- 52.8	221.9	486.9	- 265.0	- 54.4
Of which India	33.3	51.7	- 18.4	- 35.6	9.4	25.1	- 15.7	- 62.5
Japan	0.7	245.0	- 244.3	- 99.7	0.4	237.7	- 237.3	- 99.8
China	139.0	113.4	+ 25.6	+ 22.6	105.8	88.0	+ 17.8	+ 20.2
Australasia	30.5	36.0	- 5.5	- 15.3	19.2	33.9	- 14.7	- 43.4
U.S.S.R.	570.0	402.6	- 167.4	- 41.6	603.0	448.1	- 154.9	- 34.6
Central Europe	14.9	79.4	- 64.5	- 81.2	22.9	97.8	- 74.9	- 76.6
TOTAL WORLD :	3148.9	3101.4	47.5	1.5	3083.8	3024.0	+ 59.8	2.0

P = Provisional.

SOURCE : B.P.Statistical Review of World Energy June, 1991

WORLD CRUDE OIL & PETROLEUM PRODUCTS IMPORTS/EXPORTS-1990*

(Million Tonnes)

Country/Area	IMPORTS		EXPORTS	
	Crude	Products	Crude	Products
1.	2.	3.	4.	5.
U.S.A	292.4	102.7	5.9	37.1
Canada	25.8	7.3	32.5	14.6
Latin America	25.3	11.9	130.7	54.5
Western Europe	414.2	68.6	30.5	48.6
Middle East	6.9	1.7	602.8	100.8
North Africa	0.6	6.2	103.8	24.8
West Africa	-	0.5	105.6	6.1
East&Southern Africa	21.0	1.7	1.2	-
South Asia	20.8	16.8	2.3	1.7
Other Asia +	98.9	48.3	47.9	25.8
Japan	194.3	43.7	-	3.5
Australasia	8.1	10.7	7.6	2.5
U.S.S.R., E. Europe & China @	26.3	4.8	117.0	43.3
Destination not known*	53.2	38.4	-	-
Total World	1187.8	363.3	1187.8	363.3

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

@ Excludes intra-regional trade with in these Countries.

\+ Excluding China, Japan and South Asia.

Notes:

(i) Bunkers are not included as exports.

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

SOURCE: BP Statistical Review of World Energy, June 1991.

EXPORTS OF CRUDE OIL AND REFINED PRODUCTS FROM OPEC MEMBER COUNTRIES.

(Million Tonnes)

Country	1970	1975	1980	1985	1986	1987	1988	1989(P)
1.	2.	3.	4.	5.	6.	7.	8.	9.
				CRUDE OIL:				
Algeria	48.5	43.7	35.6	13.5	12.7	11.9	12.1	13.9
Ecuador	Neg.	7.3	5.4	9.6	9.7	6.2	9.4	8.7
Gabon	4.2	10.2	7.5	8.1	7.5	6.9	7.3	8.6
Indonesia	31.2	49.5	49.2	35.0	39.4	34.8	32.2	33.5
Iran, IR	164.8	232.6	39.7	77.9	72.2	84.9	84.4	100.5
Iraq	74.5	102.5	123.5	53.9	69.2	85.2	104.3	112.2
Kuwait	128.5	89.8	64.5	23.6	37.5	30.1	34.8	42.2
Libya	164.9	71.3	84.3	44.4	53.0	40.2	44.3	43.3
Nigeria	52.3	85.3	97.6	66.2	60.5	52.9	55.3	75.7
Qatar	18.1	21.3	23.2	13.9	15.2	12.6	15.2	15.9
Saudi Arabia	160.2	328.8	459.1	106.8	162.1	120.0	150.8	165.6
U.A.E.	38.7	82.8	84.5	48.5	56.2	62.0	66.9	81.9
Venezuela	121.2	73.3	64.1	41.0	47.1	51.0	48.4	49.0
TOTAL:	1007.1	1198.4	1138.2	542.4	642.3	598.7	665.4	751.0
				Refined Petroleum Products:				
Algeria	0.6	3.1	7.4	15.9	18.7	18.1	18.7	19.5
Ecuador	Neg	Neg.	1.1	0.7	0.9	0.8	1.2	1.1
Gabon	0.6	0.3	0.5	0.2	0.1	0.1	0.1	Neg.
Indonesia	4.9	5.0	8.1	7.4	7.9	9.3	10.2	11.5
Iran, IR	10.4	10.7	7.0	2.0	0.5	0.1	0.4	1.9
Iraq	0.2	1.9	1.7	0.6	0.3	5.5	5.5	7.2
Kuwait	12.5	7.0	17.1	24.5	26.1	27.5	31.6	34.3
Libya	Neg	2.3	3.6	4.5	5.1	5.5	4.5	6.3
Nigeria	0.2	0.3	3.7	1.0	0.4	0.8	1.0	1.5
Qatar	-	-	0.1	1.4	1.8	2.0	2.2	3.7
Saudi Arabia	17.3	16.5	20.6	28.5	35.4	50.7	56.8	53.2
U.A.E.	-	-	1.0	4.6	5.5	5.7	5.8	7.7
Venezuela	51.5	30.6	28.1	26.3	28.4	23.7	31.0	30.7
TOTAL:	98.2	77.7	100.0	117.6	131.1	149.8	169.0	178.7

P = Provisional.

SOURCE: OPEC Annual Statistical Bulletin 1989.

CRUDE OIL IMPORTS FROM OPEC MEMBER COUNTRIES BY REGIONS 1970-1989

(MILLION TONNES)

Import Region	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989(P)
North America	68.0	169.7	211.7	152.2	80.9	69.0	68.4*	63.8*	109.7*	125.8*	137.6	175.1
Of Which USA	46.4	135.3	188.9	135.8	71.5	63.6	63.7	59.2	102.4	120.0	132.0	167.2
Latin America	96.1	144.1	114.8	90.6	70.6	62.9	58.8*	47.3*	43.8*	34.4*	40.2	37.3
Western Europe	560.5	515.5	453.2r	355.7	275.6	232.9	233.1*	223.3*	261.7*	218.6*	235.9	256.7
Of which:												
France	106.5	103.8	100.0	71.8	57.0	44.1	42.9	37.3	42.8	25.8	29.2	35.2
Germany FR	68.5	62.2	65.8	47.1	40.2	32.5	25.1	20.6	25.9	23.2	27.9	32.4
Italy	108.7	86.4	67.5	65.6	61.0	52.7	51.2	49.3	56.8	49.5	44.2	48.9
U.K.	106.6	80.4	34.5	24.2	18.5	12.4	9.6	10.5	12.7*	9.1	11.9	12.9
Middle East	20.1	15.5	21.8	21.7	23.8	19.2	18.5	19.1*	21.1*	15.2	13.9	14.1
Africa	23.6	31.2	16.2	14.8	10.1	7.5	8.3*	8.2*	9.8*	11.0	9.9	11.4
Asia and Far East	214.0	277.9	286.4	266.5	226.9	213.3	194.1*	165.8*	170.1	166.8	195.6	221.8
Of which :												
Japan	161.4	198.4	177.1	153.9	138.4	134.0	134.9	114.5*	107.6	113.7	115.6	132.9
Oceania	15.1	8.8	10.6	10.4	9.1	5.3	4.8*	2.3*	3.1*	5.7*	4.3	7.0
CPEs	2.4	15.2	17.2	8.9r	8.6	6.0	9.8r	11.0*	21.9*	20.2r	23.8r	26.9
Unspecified	4.1	16.6	6.2	1.0	4.1	4.7	3.7	1.6	1.1	1.0	4.1	0.7
OECD AREA	805.0	892.4	852.8	672.9	505.3	441.2	441.2	396.7	477.7	458.3	486.1	565.9
TOTAL WORLD :	1003.9	1194.5	1138.1	921.8	709.7*	620.8*	599.5*	542.4*	642.3*	598.7*	665.3*	751.0

P = Provisional

r = Revised.

Source = OPEC Annual Statistical Bulletin 1989.

Note : Figures Converted to million tonnes using Conversion factor : 1 barrel = 0.136 Metric tonnes
* = provisional or estimated figures, as of August 1990.

CRUDE OIL IMPORTS FROM OPEC MEMBER COUNTRIES BY REGIONS 1970-1989

(MILLION TONNES)

Import Region	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989(P)
North America	68.0	169.7	211.7	152.2	80.9	69.0	68.4*	63.8*	109.7*	125.8*	137.6	175.1
Of Which USA	46.4	135.3	188.9	135.8	71.5	63.6	63.7	59.2	102.4	120.0	132.0	167.2
Latin America	96.1	144.1	114.8	90.6	70.6	62.9	58.8*	47.3*	43.8*	34.4*	40.2	37.3
Western Europe	560.5	515.5	453.2r	355.7	275.6	232.9	233.1*	223.3*	261.7*	218.6*	235.9	256.7
Of which:												
France	106.5	103.8	100.0	71.8	57.0	44.1	42.9	37.3	42.8	25.8	29.2	35.2
Germany FR	68.5	62.2	65.8	47.1	40.2	32.5	25.1	20.6	25.9	23.2	27.9	32.4
Italy	108.7	86.4	67.5	65.6	61.0	52.7	51.2	49.3	56.8	49.5	44.2	48.9
U.K.	106.6	80.4	34.5	24.2	18.5	12.4	9.6	10.5	12.7*	9.1	11.9	12.9
Middle East	20.1	15.5	21.8	21.7	23.8	19.2	18.5	19.1*	21.1*	15.2	13.9	14.1
Africa	23.6	31.2	16.2	14.8	10.1	7.5	8.3*	8.2*	9.8*	11.0	9.9	11.4
Asia and Far East	214.0	277.9	286.4	266.5	226.9	213.3	194.1*	165.8*	170.1	166.8	195.6	221.8
Of which :												
Japan	161.4	198.4	177.1	153.9	138.4	134.0	134.9	114.5*	107.6	113.7	115.6	132.9
Oceania	15.1	8.8	10.6	10.4	9.1	5.3	4.8*	2.3*	3.1*	5.7*	4.3	7.0
CPEs	2.4	15.2	17.2	8.9r	8.6	6.0	9.8r	11.0*	21.9*	20.2r	23.8r	26.9
Unspecified	4.1	16.6	6.2	1.0	4.1	4.7	3.7	1.6	1.1	1.0	4.1	0.7
OECD AREA	805.0	892.4	852.8	672.9	505.3	441.2	441.2	396.7	477.7	458.3	486.1	565.9
TOTAL WORLD :	1003.9	1194.5	1138.1	921.8	709.7*	620.8*	599.5*	542.4*	642.3*	598.7*	665.3*	751.0

P = Provisional

r = Revised.

Source = OPEC Annual Statistical Bulletin 1989.

Note : Figures Converted to million tonnes using Conversion factor : 1 barrel = 0.136 Metric tonnes
* = provisional or estimated figures, as of August 1990.

COUNTRY-WISE OPEC CRUDE OIL EXPORT BY REGIONS : 1989(P)

(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-ica	Asia & Far East (Excl. Japan)	Middle East	Africa	Total Develop-ing Countries	CPES	Un-Speci-fied	Total World
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Algeria	5.0	262.0	-	-	267.0	6.2	-	-	6.1	12.3	1.2	-	280.5
2. Ecuador	85.4	-	-	-	85.4	64.1	12.8	-	-	76.9	-	12.3	174.6
3. Gabon	70.0	85.5	-	1.7	157.2	9.0	5.4	-	1.7	16.1	-	-	173.3
4. Indonesia	123.8	1.2	17.7	435.5	578.2	-	63.8	-	-	63.8	33.7	-	675.7
5. Iran, IR	17.5	1100.5	-	293.3	1411.3	95.0	258.7	25.0	35.0	413.7	200.0	-	2025.0
6. Iraq	453.0	870.0	-	217.2	1540.2	160.0	154.8	50.0	75.0	439.8	280.0	-	2260.0
7. Kuwait	165.0	220.0	-	266.7	651.7	1.0	130.3	5.0	12.0	148.3	-	-	800.0
8. S.P. Libyan,A	-	836.0	-	-	836.0	-	2.0	4.0	2.0	8.0	28.0	-	872.0
9. Nigeria	864.2	566.7	-	-	1430.9	25.0	-	-	70.0	95.0	-	-	1525.9
10. Qatar	2.1	15.2	2.5	213.4	233.2	20.0	66.8	-	-	86.8	-	-	320.0
11. Saudi Arabia	1042.4	879.2	46.8	519.8	2488.2	97.5	545.8	191.4	12.6	847.3	-	-	3335.5
12. U.A.E.	72.6	160.0	74.1	730.6	1037.3	40.0	549.7	8.0	15.0	612.7	-	-	1650.0
13. Venezuela	626.6	124.6	-	-	751.2	233.8	-	-	-	233.8	-	1.3	986.3
TOTAL	3527.6	5120.9	141.1	2678.2	11467.8	751.6	1790.1	283.4	229.4	3054.5	542.9	13.6	15078.8

SOURCE : OPEC Annual Statistical Bulletin- 1989

P : Provisional

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: 1970-1989 @

(Billion US $)

OPEC MEMBER COUNTRIES	1970	1975	1980	1983	1984	1986	1988	1989
1.	2.	3.	4.	5.	6.	7.	8.	9.
Algeria	0.68	4.30	12.65	9.47	9.19	4.82	4.99	7.00
Ecuador	Neg.	0.52	1.55	1.58	1.78	0.98	0.98	1.15
Gabon	0.06	0.92	1.74	1.65	1.68	0.72	0.78	1.20
Indonesia	0.45	5.31	15.60	13.56	12.48	5.50	5.19	5.72
Iran	2.36	19.63	13.29	19.22	12.26	7.18	8.17	12.50
Iraq	0.79	8.23	26.30	7.82	9.35	6.90	10.95	14.50
Kuwait	1.60	8.42	17.68	9.74	10.74	6.38	6.84	10.86
Libya	2.36	6.67	21.38	11.86	10.59	5.44	5.17	7.50
Nigeria	0.72	7.46	25.29	10.06	11.75	6.01	6.63	8.70
Qatar	0.23	1.76	5.41	3.11	4.39	1.72	1.71	2.00
Saudi Arabia	2.42	29.47	105.81	42.81	34.24	16.98	19.02	24.00
U.A.E.	0.52	6.76	19.56	12.24	12.98	7.45	7.35	11.50
Venezuela	2.37	8.32	18.25	13.84	12.14	6.65	8.16	10.02
TOTAL:	14.54	107.77	284.49	156.94	143.57	76.74	85.93	116.65

SOURCE: OPEC Annual Statistical Bulletin - 1989.

@ Where applicable, petroleum product exports are included. Data for some countries may include exports of condensates.

Note : Figures when added, may not correspond to totals, due to rounding off
Starting 1980, Saudi Arabian data Excludes NGLs.

OFFICIAL DEVELOPMENT ASSISTANCE FROM OECD AND OPEC MEMBERS: 1985-89

COUNTRIES	AMOUNT (Million of U.S.$) 1985	1987	1988	1989	As percentage of donor G.N.P. 1985	1987	1988	1989
	(Million of US.$)							
1.	2.	3.	4.	5.	6.	7.	8.	9.
OECD:								
Italy	1098	2615	3193	3613	0.26	0.35	0.39	0.42
New Zealand	54	87	104	87	0.25	0.26	0.27	0.22
United Kingdom	1530	1871	2645	2587	0.33	0.28	0.32	0.31
Japan	3797	7342	9134	8949	0.29	0.31	0.32	0.32
Austria	248	201	301	283	0.38	0.17	0.24	0.23
Finland	211	433	608	706	0.40	0.49	0.59	0.63
Australia	749	627	1101	1020	0.48	0.34	0.46	0.38
Canada	1631	1885	2347	2320	0.49	0.47	0.50	0.44
Netherlands	1136	2094	2231	2094	0.91	0.98	0.98	0.94
Belgium	440	687	601	703	0.55	0.48	0.39	0.46
France	3995	6525	6865	7450	0.78	0.74	0.72	0.78
United States	9403	9115	10141	7676	0.24	0.20	0.21	0.15
Denmark	440	859	922	937	0.80	0.88	0.89	0.94
Germany	2942	4391	4731	4949	0.47	0.39	0.39	0.41
Norway	574	890	985	917	1.01	1.09	1.13	1.04
Sweden	840	1375	1534	1799	0.86	0.88	0.86	0.97
Switzerland	320	547	617	558	0.31	0.31	0.32	0.30
Ireland	39	51	57	49	0.24	0.19	0.20	0.17
TOTAL:	29429	41595	48117	46697				
OPEC								
Nigeria	45	30	14	. .	0.06	0.13	0.03	. .
Iran	-72	-10	39	. .	-0.04	-0.01	0.02	. .
Iraq	-32	-37	-28	37	-0.07	-0.08	-0.05	. .
Algeria	54	39	13	41	0.10	0.06	0.02	. .
Venezuela	32	24	49	. .	0.00	0.02	0.04	. .
Libya	57	63	129	82	0.24	0.25	0.52	. .
Saudi Arabia	2630	2888	2098	1171	2.98	3.88	2.70	1.46
Kuwait	771	316	108	169	3.17	1.23	0.41	0.54
U.A.E.	122	15	-17	25	0.45	0.07	-0.07	0.10
Qatar	8	0	4	1	0.15	0.00	0.08	. .
TOTAL OAPEC	3610	3284	2307	. .	1.39	1.10	0.86	. .
TOTAL OPEC	3615	3328	2409	. .	0.61	0.63	0.45	. .

Source : World Development Report 1991.

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	1880.0
Utilisation	32.9	40.0	161.2	175.5	222.1	218.8	218.4
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	6.9
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	42.6
Kuwait Fund: for Arab Economic Develp.							
Authorisation	--	--	30.8*	--	--	36.1	--
Utilisation	8.6	25.5	53.4	23.0	10.8	1.8	1.5
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	51.0

* = Government account only.

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

SOURCE = Economic Survey, 1990-91

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					12.480	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	11.40	11.33b)			12.49			
Kuwait:												
Kuwait	31	10.365		11.300		11.230			12.370		12.270	
U.A.E. :												
Umm Shaif	37	10.868	10.645	11.695					12.280	13.040		
Murban	39	11.379	10.868	11.918					12.500	13.260		
Zakum	40	11.313	10.775	11.825					12.410	12.090		
Iraq												
Basrah	35	10.48		11.53			11.43d)		12.58d)			
Qatar												
Merine	36	10.80		11.66					13.00			
Dukhan	40	11.17		11.85					13.19			
Oman												
Oman Blend	34											
MEDITERRANEAN & AFRICAN CRUDES.												
Iraq												
Kirkukh	36						11.65d)		12.77d)			
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			11.30			12.55	12.52	13.71		13.66	13.55
INDONESIAN CRUDE												
Indonesia:												
Minas	34			12.80					13.55f)			
VENEZULAN CRUDES												
Venezuela:												
Tia Zuana	26				11.12a)	11.22c)	11.32	11.65	12.72	12.82e)	12.72	
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.

d) = Minimum price , f) = 30 days credit

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)		28.50m)
Iran Heavy	31	13.06		16.04	16.64d)	17.74	19.90	22.77i)		27.77m)
Kuwait:										
Kuwait	31	12.830	14.030a)	15.800	16.40d)		19.490	21.431)	25.500	
U.A.E. :										
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	16.20	16.94	19.96	21.96	23.96	25.96
Qatar										
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 July 15.
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		28.000			30.000		32.000
Arab. Berri	39	27.520		29.520			31.520		33.520
Arab. Medium	31	25.454		27.454			29.454		31.454
Arab. Heavy	27	25.000		27.000			29.000		31.000
Iran:									
Iran Light	34		31.00	35.37					
Iran Heavy	31		30.27	34.37					
Kuwait:									
Kuwait	31	27.500			29.50	31.50			
Abu Dhabi:									
Umm Shaif	37	29.360			31.36			33.36	
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			
Qatar									
Merine	36	29.23			31.23	33.23			
Dukhan	40	29.42			31.42	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)	34.6	36.69b)	37.00			
Bonny Medium	26		32.91e)	33.42	35.42b)	35.73			
INDONESIAN CRUDE									
Indonesia:									
Minas	34	27.50	29.50e)		31.50d)				
VENEZULAN CRUDES									
Venezuela:									
Tia Zuana	26	25.20	26.78a)		29.28d)	29.88			
Tia Zuana	31	26.90	28.90a)		32.40d)	33.00			
Oficina	35	28.75	30.75a)		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-ity	1981 Jan.1	1981 Jul.1	1981 Oct.1	1981 Nov.1.	1982 Jan.1.	1982 Feb.12.	1982 Feb.21.	1982 Mar.20	1982 Apr.1	1982 Jul.1	1982 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								
Arab. Berri	39			35.60		35.40			34.52			
Arab. Medium	31			33.00		32.40						
Arab. Heavy	27			31.50		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	28.30			29.30	
Kuwait:												
Kuwait	31	35.50			33.00	32.30						
U.A.E. :												
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		33.46						
Qatar												
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						
Libya												
Bregs	40	41.00	40.00		37.50	37.00				35.40		
Nigeria:												
Bonny Light	37	40.00		36.00a)	36.50b)				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										
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	Apr.1	Aug.10	1984 Oct.18	1985 Jan.1	Feb.1	July 1	1986 Mar.1	July 1.	1987 Jan.1	Feb.1	Spt.16
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
ARABIAN/PERSIAN GULF CRUDES															
Saudia Arabia:															
Arab. Light	34	30.00	29.00						28.00				17.52b)		
Arab. Berri	39	30.52	29.52					29.27	28.11				17.87b)		
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				29.11	28.05				17.50f)		
Iran Heavy	31			26.90		27.10		27.55	27.35				16.89f)		
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		12.25	8.25	17.72c)		
Murban	39		29.56					29.31	28.15		12.50	8.45	17.92c)		
Zakum	40		29.46					29.21	28.10		12.30	8.35	17.82c)		
Iraq															
Basrah	35			28.46					27.96				17.30		
Qatar															
Merine	36	30.30	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 Juana	26			27.88					27.60(1)		12.21(k)		16.72(m)		16.72
Tia Juana	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, 1989 (m) effective Jan.16

DEVELOPMENT OF CRUDE PETROLEUM PRICES (FOB) 1988-1991
(Official Selling Prices) (US $/bbl.FOB)

Crude	Country	January - March 1988	1989	1990	1991	Early April Spot Prices
Arab Light	Saudi Arabia	14.86	14.79	17.63	17.06	15.75
Arab Medium	Saudi Arabia	14.30	13.90	16.62	15.26	14.15
Arab Heavy	Saudi Arabia	13.53	13.54	16.38	12.95	11.65
Berri	Saudi Arabia	15.30	15.66	18.62	18.56	17.25
Iran Light	Iran	14.71	14.55	17.34	16.83	16.00
Iran Heavy	Iran	14.23	14.05	16.65	15.95	15.00
Basrah Light	Iraq	14.56	15.55	18.68	0.00	0.00
Basrah Medium	Iraq	0.00	0.00	0.00	0.00	0.00
Basrah Heavy	Iraq	0.00	0.00	0.00	0.00	0.00
Kirkuk	Iraq	14.73	15.81	18.87	0.00	0.00
Kuwait	Kuwait	14.23	13.71	16.52	0.00	0.00
Murban	Abu Dhabi	15.76	15.30	18.14	17.18	15.75
Dukhan	Qatar	15.21	14.98	17.48	17.23	16.30
Khafji	Neutral Zone	13.61	13.54	16.35	13.01	11.65
Es Sider	Libya	15.12	16.72	19.66	20.28	18.00
Bonny Light	Nigeria	15.93	17.28	20.36	21.25	18.50
Bonny Medium	Nigeria	15.84	17.24	20.38	20.67	17.90
Saharan	Algeria	15.72	17.49	20.40	22.00	19.35
Mandji	Gabon	13.57	15.37	18.05	17.04	14.40
Oriente	Ecuador	13.62	15.01	18.77	16.44	15.71
TJ Light	Venezuela	15.15	15.72	16.29	19.62	17.05
TJ Medium	Venezuela	13.92	14.43	15.98	15.83	13.85
Bachaquero	Venezuela	12.37	12.10	12.83	12.37	10.20
Sumatran	Indonesia	16.74	17.09	20.15	20.74	17.20
Attaka	Indonesia	16.93	17.73	20.07	21.01	18.60
OPEC Average		14.83	15.20	17.90	17.43	15.75
Persian Gulf		14.74	14.53	17.30	16.05	14.85

COUNTRY EXPORT SHARES
(percentages)

Saudi Arabia	25.24	24.05	22.57	35.11	35.81
Iran	8.46	11.19	12.69	14.21	14.34
Iraq	15.79	15.04	12.98	1.02	1.04
Kuwait	6.87	7.08	7.84	0.07	0.08
UAE	7.93	8.40	8.31	10.35	10.34
Qatar	2.22	1.98	1.65	1.67	1.78
Neutralzone	1.46	1.88	1.49	0.18	0.19
Libya	6.47	5.82	5.09	6.56	6.35
Nigeria	7.11	6.81	8.07	8.31	8.20
Algeria	3.34	3.27	3.20	3.50	3.57
Gabon	0.97	0.85	0.89	1.31	1.27
Ecuador	1.44	1.27	1.40	1.31	1.22
Venezuela	8.75	7.90	7.99	10.64	9.96
Indonesia	4.85	4.46	5.84	5.76	5.87

Source: The World Bank/International Finance Corporation - OFFICE MEMORANDUM Dated April 18, 1991.

PETROLEUM PRODUCTS PRICE DEVELOPMENTS, 1991
(US Dollar Per Metric Ton, FOB)

	April-Junea/ 1990	July-Sept.b/ 1990	Oct.-Dec.c/ 1990	Jan.-Mar.d/ 1991
Caribbean Market (Curacao)				
Gasoline	231.20	317.90	307.02	213.10
Kerosene	210.70	252.10	315.21	212.40
Gas Oil	186.44	234.60	276.61	219.00
Fuel Oil	90.45	130.70	144.05	77.10
Mid East Market (Bahrain)				
Gasoline	234.00	335.10	346.03	299.10
Kerosene	175.90	295.30	378.25	394.80
Gas Oil	167.80	251.70	304.58	360.50
Fuel Oil	81.80	126.30	141.37	94.50
Far East Market (Singapore)				
Gasoline	236.60	287.10	297.99	290.80
Kerosene	180.80	260.50	368.30	358.30
Gas Oil	172.50	236.20	310.80	326.30
Fuel Oil	98.80	139.10	195.65	109.90

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

FOB PRICE OF PETROLEUM PRODUCTS
(US Dollars/Barrel)

	Price*			
	1988	1989	1990	1991
Caribbean Market (Curacao)				
Gasoline	19.74	23.52	26.87	24.78
Kerosene	21.63	24.35	26.45	26.89
Gas Oil	20.16	22.26	25.19	29.59
Fuel Oil	12.74	12.49	13.49	11.51
Mid East Market (Bahrain)				
Gasoline	23.68	22.88	27.20	34.78
Kerosene	24.15	24.35	25.20	49.97
Gas Oil	23.31	22.05	24.57	48.72
Fuel Oil	10.10	10.59	13.10	14.10
Far East Market (Singapore)				
Gasoline	20.99	21.62	24.98	33.81
Kerosene	21.41	23.10	25.20	45.35
Gas Oil	20.58	22.89	25.62	44.09
Fuel Oil	12.74	11.23	15.25	16.40

SOURCE : The World Bank/International Finance Corporation -
- Office Memorandum dated April 18, 1991.
* 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	1990
			A. FOR INDUSTRIAL USE			
Australia	64.91	86.40	109.14	111.37	116.13	NA
Austira	226.79	191.01	167.64	166.61	142.25	NA
Belgium	186.87	175.95	128.43	114.63	113.96	144.03
Canada	104.07	103.59	93.14	92.28	83.70	84.20
Finland	208.93	166.60	118.13	116.03	118.86	146.47
France	187.43	179.13	149.19	133.45	129.58	NA
Germany	206.74	185.00	153.10	141.16	143.94	NA
Ireland	620.00	268.36	296.13	303.61	283.82	328.49
Italy	175.88	164.37	118.20	89.81	N.A.	NA
Japan	442.20	418.36	495.71	478.39	449.81	NA
Netheralands	172.61	156.85	116.34	110.35	105.52	NA
New Zealand	115.91	95.60	165.62	215.16	188.60	192.20
Spain	317.69	250.99	240.49	247.97	247.44	NA
Switzerland	424.14	318.32	278.81	270.79	241.07	296.93
United Kingdom	159.95	145.97	153.32	164.45	144.64	NA
United States	149.10	152.18	113.27	114.04	112.50	111.44
			B. FOR HOUSEHOLD USE.			
Australia	189.78	N.A.	N.A.	230.44	236.54	NA
Austria	423.45	211.4	163.2	367.99	331.52	391.13
Belgium	354.29	152.8	106.2	345.58	340.94	417.70
Canada	147.76	N.A.	N.A.	170.80	175.93	186.59
Denmark	N.A.	N.A.	N.A.	625.41	563.34	NA
Finland	208.93	N.A.	N.A.	138.13	142.36	176.47
France	407.66	N.A.	N.A.	432.00	406.16	NA
Germany	355.30	160.8	162.6	317.85	311.71	N.A.
Ireland	692.86	109.5	120.4	550.00	514.16	575.08
Italy	289.27	164.3	109.5	440.74	N.A.	N.A.
Japan	612.06	210.6	148.5	978.00	989.71	N.A.
Luxembourg	271.12	N.A.	N.A.	NA	N.A.	N.A.
Netherlands	255.43	172.1	123.6	280.66	249.78	335.68
New Zealand	207.45	N.A.	N.A.	225.76	222.20	231.02
Spain	430.25	235.6	212.7	483.24	484.52	N.A.
Switzerland	837.93	N.A.	N.A.	1165.07	1037.20	1254.29
United Kingdom	248.73	165.9	227.1	300.93	291.58	N.A.
United States	199.19	148.4	96.7	210.74	216.91	233.77

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 & 1990.

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
		CARIBBEAN MARKET				
Latin America and Caribbean						
Antigua	St.Johns	Crude	111.23	108.79	129.18	120.42
		Gasoline	174.01	206.03	235.00	217.40
		Kerosene	175.11	196.12	212.70	216.70
		Gas Oil	153.36	168.36	190.10	223.30
		Fuel Oil	89.44	87.20	93.90	81.10
Argentina	La Plata	Crude	124.04	118.97	139.36	131.62
		Gasoline	192.29	217.37	246.30	231.00
		Kerosene	193.40	207.45	224.10	230.30
		Gas Oil	171.65	179.70	201.40	236.90
		Fuel Oil	107.72	98.54	105.20	94.70
Bahamas	Freeport	Crude	111.26	108.72	129.12	120.31
		Gasoline	176.97	207.94	236.90	221.50
		Kerosene	178.08	198.02	214.70	220.80
		Gas Oil	156.33	170.27	192.00	227.40
		Fuel Oil	92.41	89.10	95.80	85.20
Barbados	Bridgetown	Crude	111.47	108.92	129.31	120.58
		Gasoline	174.22	206.13	235.10	217.50
		Kerosene	175.32	196.21	212.80	216.80
		Gas Oil	153.57	168.46	190.20	223.40
		Fuel Oil	89.65	87.29	94.00	81.20
Belize	Belize	Crude	0.00	0.00	0.00	0.00
		Gasoline	176.62	207.71	236.70	219.40
		Kerosene	177.72	197.79	214.40	218.70
		Gas Oil	155.98	170.03	191.80	225.30
		Fuel Oil	92.05	88.87	95.60	83.20
Bermuda	Hamilton	Crude	0.00	0.00	0.00	0.00
		Gasoline	177.66	208.48	237.40	220.00
		Kerosene	178.77	198.56	215.20	219.30
		Gas Oil	157.02	170.80	192.50	225.90
		Fuel Oil	93.09	89.64	96.40	83.80
Brazil	Santos	Crude	122.43	116.25	136.44	129.61
		Gasoline	185.96	214.16	243.10	227.50
		Kerosene	187.06	204.24	220.90	226.80
		Gas Oil	165.32	176.48	198.20	233.50
		Fuel Oil	101.39	95.32	102.00	91.30

Contd..

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
Chile	Valparaiso	Crude	129.34	120.23	140.63	133.17
		Gasoline	191.43	218.79	247.70	231.70
		Kerosene	192.53	208.87	225.50	231.00
		Gas Oil	170.79	181.11	202.90	237.60
		Fuel Oil	106.86	99.95	106.70	95.40
Colombia	Barranquilla	Crude	109.88	107.87	128.26	119.10
		Gasoline	173.99	206.17	235.10	217.20
		Kerosene	175.09	196.25	212.90	216.50
		Gas Oil	153.34	168.49	190.20	223.10
		Fuel Oil	89.42	87.33	94.00	80.90
Costa Rica	Puerto Limon	Crude	111.71	108.95	129.34	120.52
		Gaspline	176.95	207.77	236.70	219.30
		Kerosene	178.06	197.85	214.50	218.60
		Gas Oil	156.31	170.09	191.80	225.20
		Fuel Oil	92.38	88.93	95.60	83.00
Dominican R.	Santo Domingo	Crude	109.99	107.95	128.34	119.18
		Gasoline	173.82	206.02	235.00	217.30
		Kerosene	174.92	196.10	212.70	216.60
		Gas Oil	153.18	168.34	190.10	223.20
		Fuel Oil	89.25	87.18	93.90	81.00
El Salvador	Cutuco	Crude	112.63	109.68	130.07	121.75
		Gasoline	182.84	213.40	242.40	225.30
		Kerosene	183.94	203.50	220.10	224.60
		Gas Oil	162.20	175.74	197.50	231.20
		Fuel Oil	98.27	94.58	101.30	89.00
Guatemala	Puerto-Barrios	Crude	124.31	108.69	129.08	119.73
		Gasoline	176.76	207.86	236.80	219.60
		Kerosene	177.87	197.94	214.60	218.90
		Gas Oil	156.12	170.19	191.90	225.50
		Fuel Oil	92.20	89.03	95.70	83.30
Haiti	Port au - Prince	Crude	0.00	0.00	0.00	0.00
		Gasoline	174.65	206.42	235.40	217.90
		Kerosene	175.76	196.50	213.10	217.20
		Gas Oil	154.01	168.74	190.50	223.80
		Fuel Oil	90.09	87.58	94.30	81.60
Honduras	Puerto - cortez	Crude	112.13	109.35	129.75	120.41
		Gasoline	178.54	209.27	238.20	219.80
		Kerosene	179.64	199.35	216.00	219.10
		Gas Oil	157.90	171.59	193.30	225.70
		Fuel Oil	93.97	90.43	97.10	83.50

Contd..

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
Senegal	Dakar	Crude	120.46	114.56	134.95	127.42
		Gasline	184.75	212.98	241.90	225.40
		Kerosene	185.85	203.06	219.70	224.70
		Gas Oil	164.11	175.31	197.10	231.30
		Fuel Oil	100.18	94.15	100.90	89.10
Sierra Leone	Freetown	Crude	129.88	115.95	136.34	129.20
		Gasoline	184.71	215.41	244.40	226.00
		Kerosene	185.81	205.49	222.10	225.30
		Gas Oil	164.07	177.73	199.50	231.90
		Fuel Oil	100.14	96.57	103.30	89.70
Togo	Kpeme	Crude	121.40	115.05	135.44	126.64
		Gasoline	188.20	218.95	247.90	226.90
		Kerosene	189.30	209.03	225.70	226.20
		Gas Oil	167.56	181.28	203.00	232.80
		Fuel Oil	103.63	100.11	106.80	90.60
Zaire	Banana	Crude	121.61	115.21	135.61	127.73
		Gasoline	194.36	214.02	243.00	232.00
		Kerosene	195.46	204.10	220.70	231.30
		Gas Oil	173.72	176.35	198.10	238.00
		Fuel Oil	109.79	95.19	101.90	95.80
Europe, Middle East, North Africa						
Gibraltar	Gibraltar	Crude	0.00	0.00	0.00	0.00
		Gasoline	185.63	215.45	244.40	227.10
		Kerosene	186.73	205.53	222.20	226.40
		Gas Oil	164.99	177.77	199.50	233.00
		Fuel Oil	101.06	96.61	103.30	90.80
Morocco	Mohammedia	Crude	117.35	113.75	134.14	126.23
		Gasoline	185.56	213.60	242.60	228.50
		Kerosene	186.67	203.68	220.30	227.80
		Gas Oil	164.92	175.92	197.70	234.40
		Fuel Oil	101.00	94.76	101.50	92.20
Portugal	Lisbon	Crude	117.37	113.06	133.45	125.64
		Gasoline	185.02	214.41	243.40	226.80
		Kerosene	186.12	204.49	221.10	226.00
		Gas Oil	164.38	176.73	198.50	232.70
		Fuel Oil	100.45	95.57	102.30	90.50
Spain	Huelva	Crude	117.29	113.12	133.51	125.61
		Gasoline	185.86	209.13	238.10	227.50
		Kerosene	186.96	199.21	215.80	226.80
		Gas Oil	165.22	171.46	193.20	233.40
		Fuel Oil	101.29	90.30	97.00	91.20

Contd...

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
		MIDDLE EAST MARKET				
Africa South of Sahara						
Djibouti	Djibouti	Crude	110.96	108.69	129.08	120.29
		Gasoline	212.53	204.49	241.80	307.30
		Kerosene	199.60	200.08	206.80	403.20
		Gas Oil	181.27	170.82	189.50	368.80
		Fuel Oil	76.26	78.44	95.30	102.30
Ethiopia	Assab	Crude	111.51	109.09	129.49	120.70
		Gasoline	213.66	205.74	243.00	308.20
		Kerosene	200.73	201.33	208.00	404.10
		Gas Oil	182.40	172.07	190.70	369.70
		Fuel Oil	77.39	79.69	96.50	103.20
Kenya	Mombassa	Crude	112.42	109.68	130.07	121.56
		Gasoline	215.52	207.92	245.20	310.00
		Kerosene	202.59	203.51	210.20	405.90
		Gas Oil	184.26	174.25	192.90	371.60
		Fuel Oil	79.25	81.86	98.70	105.00
Madagascar	Tamatave	Crude	113.85	110.69	131.09	122.74
		Gasoline	218.42	207.20	244.50	312.60
		Kerosene	205.50	202.79	209.50	408.40
		Gas Oil	187.16	173.54	192.20	374.10
		Fuel Oil	82.15	81.15	98.00	107.50
Mauritius	Port Louis	Crude	0.00	0.00	0.00	0.00
		Gasoline	218.03	208.96	246.20	312.60
		Kerosene	205.10	204.55	211.30	408.40
		Gas Oil	186.76	175.29	193.90	374.10
		Fuel Oil	81.75	82.90	99.70	107.50
Mozambique	Maputo	Crude	114.59	111.18	131.57	123.67
		Gasoline	219.93	213.38	250.70	314.60
		Kerosene	207.00	208.97	215.70	410.50
		Gas Oil	188.67	179.72	198.40	376.10
		Fuel Oil	83.66	87.33	104.20	109.50
Namibia	Walvis Bay	Crude	0.00	0.00	0.00	0.00
		Gasoline	228.02	208.07	245.30	319.30
		Kerosene	215.09	203.66	210.40	415.20
		Gas Oil	196.75	174.40	193.00	380.80
		Fuel Oil	91.74	82.02	98.90	114.30
Reunion	Reunion	Crude	0.00	0.00	0.00	0.00
		Gasoline	219.30	213.38	250.70	312.90
		Kerosene	206.38	208.97	215.70	408.80
		Gas Oil	188.04	179.72	198.40	374.40
		Fuel Oil	83.03	87.33	104.20	107.90
Seychelles	Port Victoria	Crude	0.00	0.00	0.00	0.00
		Gasoline	215.14	208.07	245.30	309.10
		Kerosene	202.22	203.66	210.40	404.90
		Gas Oil	183.88	174.40	193.00	370.60
		Fuel Oil	78.87	82.02	98.90	104.00

Contd..

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
Somalia	Mogadiscio	Crude	112.15	109.25	129.65	120.93
		Gasoline	214.95	204.99	242.30	308.70
		Kerosene	202.03	200.58	207.30	404.60
		Gas Oil	183.69	171.32	190.00	370.20
		Fuel Oil	78.68	78.94	95.80	103.70
South Africa	Cape Town	Crude	126.45	112.36	132.75	124.79
		Gasoline	224.03	204.84	242.10	316.90
		Kerosene	211.10	200.43	207.10	412.80
		Gas Oil	192.76	171.17	189.80	378.50
		Fuel Oil	87.75	78.78	95.60	111.90
Sudan	Port Sudan	Crude	112.00	109.52	129.92	120.84
		Gasoline	214.66	211.48	248.80	308.30
		Kerosene	201.74	207.07	213.80	404.20
		Gas Oil	183.40	177.81	196.40	369.80
		Fuel Oil	78.39	85.43	102.30	103.30
Tanzania	Dar Es Salaam	Crude	124.85	109.90	130.30	121.74
		Gasoline	216.23	205.41	242.70	310.40
		Kerosene	203.30	201.00	207.70	406.30
		Gas Oil	184.97	171.75	190.40	371.90
		Fuel Oil	79.96	79.36	96.20	105.40
South Asia						
India	Bombay	Crude	110.75	108.57	128.96	120.01
		Gasoline	212.11	206.22	243.50	306.70
		Kerosene	199.19	201.81	208.50	402.60
		Gas Oil	180.85	172.55	191.20	368.20
		Fuel Oil	75.84	80.17	97.00	101.70
Pakistan	Karachi	Crude	109.66	107.89	128.28	119.25
		Gasoline	209.90	203.37	240.60	305.10
		Kerosine	196.97	198.96	205.70	401.00
		Gas Oil	178.63	169.71	188.30	366.60
		Fuel Oil	73.62	77.32	94.20	100.10
Europe, Middle East, North Africa						
Cyprus	Larnaca	Crude	118.47	115.19	135.59	126.62
		Gasoline	227.33	210.19	247.50	321.10
		Kerosene	214.41	205.78	212.50	417.00
		Gas Oil	196.07	176.52	195.20	382.70
		Fuel OIl	91.06	84.14	101.00	116.10
Creece	Salonica	Crude	119.25	115.73	136.13	127.27
		Gasoline	228.92	216.60	253.90	322.50
		Kerosine	215.99	212.19	218.90	418.40
		Gas Oil	197.66	182.93	201.60	384.00
		Fuel Oil	92.65	90.55	107.40	117.50
Isreal	Haifa	Crude	118.28	115.01	135.41	126.48
		Gasoline	226.95	218.33	255.60	320.80
		Kerosene	214.03	213.92	220.60	416.70
		Gas Oil	195.69	184.67	203.30	382.40
		Fuel Oil	90.68	92.28	109.10	115.80

Contd..

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
Jordan	Aqaba	Crude	113.14	110.10	130.49	121.90
		Gasoline	216.98	207.94	245.20	310.80
		Kerosene	204.06	203.53	210.20	406.70
		Gas Oil	185.72	174.27	192.90	372.30
		Fuel Oil	80.71	81.88	98.70	105.80
Lebanon	Beirut	Crude	118.12	115.00	135.40	126.45
		Gasoline	226.62	214.93	252.20	320.80
		Kerosene	213.69	210.52	217.20	416.70
		Gas Oil	195.36	181.26	199.90	382.30
		Fuel Oil	90.35	88.87	105.70	115.80
Turkey	Istanbul	Crude	120.33	116.16	136.55	128.00
		Gasoline	231.13	216.20	253.50	324.10
		Kerosene	218.21	211.79	218.50	420.00
		Gas Oil	199.87	182.53	201.20	385.60
		Fuel Oil	94.86	90.14	107.00	119.10
Yemen,A.R.	Hodeidah	Crude	0.00	0.00	0.00	0.00
		Gasoline	213.32	210.86	248.10	308.20
		Kerosene	200.40	206.45	213.20	404.10
		Gas Oil	182.06	177.19	195.80	369.70
		Fuel Oil	77.05	84.81	101.60	103.20
Yemen PDR	Aden	Crude	123.96	108.74	129.13	120.31
		Gasoline	212.55	204.20	241.50	307.40
		Kerosene	199.63	199.79	206.50	403.30
		Gas Oil	181.29	170.53	189.20	368.90
		Fuel Oil	76.28	78.15	95.00	102.40
Yugoslavia	Rijeca	Crude	120.33	116.49	136.88	128.29
		Gasoline	231.13	212.02	249.30	323.80
		Kerosene	218.21	207.61	214.30	419.70
		Gas Oil	199.87	178.35	197.00	385.40
		Fuel Oil	94.86	85.97	102.80	118.80
		FAR EAST MARKET				
South Asia						
Bangladesh	Chittagong	Crude	114.13	110.60	130.99	122.57
		Gasoline	189.05	200.27	229.20	298.30
		Kerosene	177.63	196.76	213.40	366.00
		Gas Oil	160.69	183.64	203.90	333.90
		Fuel Oil	93.66	89.35	116.30	117.10

Contd..

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
Burma	Rangoon	Crude	113.61	110.49	130.88	122.48
		Gasoline	187.04	192.30	221.30	297.10
		Kerosene	175.62	188.79	205.40	364.70
		Gas Oil	158.69	175.67	195.90	332.70
		Fuel Oil	91.65	81.38	108.30	115.80
India	Madras	Crude	113.02	110.06	130.45	121.78
		Gasoline	189.55	196.65	225.60	298.90
		Kerosene	178.13	193.14	209.80	366.50
		Gas Oil	161.19	180.02	200.30	334.50
		Fuel Oil	94.16	85.73	112.70	117.60
Sri Lanka	Colombo	Crude	111.89	109.07	129.47	120.75
		Gasoline	189.26	193.01	222.00	298.30
		Kerosene	177.84	189.51	206.10	365.90
		Gas Oil	160.90	176.38	196.60	333.90
		Fuel Oil	93.87	82.09	109.00	117.00
East Asia and Pacific						
Hong Kong	Hong Kong	Crude	116.78	112.49	132.88	124.95
		Gasoline	188.51	192.26	221.20	298.10
		Kerosene	177.08	188.76	205.40	365.80
		Gas Oil	160.15	175.63	195.90	333.70
		Fuel Oil	93.12	81.34	108.30	116.90
Korea	Inchon	Crude	118.79	113.87	134.26	126.62
		Gasoline	192.44	191.99	221.00	301.70
		Kerosene	181.01	188.49	205.10	369.30
		Gas Oil	164.08	175.36	195.60	337.20
		Fuel Oil	97.04	81.07	108.00	120.40
Philippines	Manila	Crude	116.35	112.36	132.75	124.77
		Gasoline	187.65	194.92	223.90	297.70
		Kerosene	176.23	191.41	208.00	365.40
		Gas Oil	159.29	178.29	198.50	333.30
		Fuel Oil	92.26	84.00	111.00	116.50
P.N.Guinea	Bougainville	Crude	0.00	0.00	0.00	0.00
		Gasoline	196.01	191.72	220.70	303.80
		Kerosene	184.59	188.22	204.80	371.50
		Gas Oil	167.65	175.09	195.30	339.40
		Fuel Oil	100.62	80.80	107.80	122.60
Thailand	Bangkok	Crude	115.71	111.78	132.18	124.04
		Gasoline	186.37	197.69	226.60	296.20
		Kerosene	174.95	194.18	210.80	363.80
		Gas Oil	158.02	181.06	201.30	331.80
		Fuel Oil	90.98	86.77	113.70	114.90

Contd..

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

Country	Discharge Port	Product	Price (*) 1988	1989	1990	1991
Vietnam	Hochimin	Crude	0.00	0.00	0.00	0.00
		Gasoline	188.11	190.51	219.50	297.00
		Kerosene	176.69	187.00	203.60	364.70
		Gas Oil	159.75	173.88	194.10	332.60
		Fuel Oil	92.72	79.59	106.50	115.80
Fiji	Suva	Crude	0.00	0.00	0.00	0.00
		Gasoline	201.86	191.76	220.70	309.10
		Kerosene	190.44	188.25	204.90	376.80
		Gas Oil	173.50	175.13	195.40	344.70
		Fuel Oil	106.47	80.84	107.80	127.90

(*) Mid - February 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 April 18, 1991.

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
2.10.80	31.97		31.32	+ 1.15
6. 3.81	34.83		36.72	+ 1.89
5. 6.81	34.75		31.84	- 2.91
4. 9.81	34.66	(34.32)	31.48	- 3.18
4.12.81	33.96		33.12	- 0.84
5. 3.82	33.36		28.69	- 4.67
4. 6.82	33.14		32.10	- 1.04
3. 9.82	33.18		31.60	- 1.58
3.12.82	33.17		29.73	- 3.43
4. 3.83	32.83		27.56	- 5.27
11. 3.83	32.83		27.56	- 5.27
18. 3.83	32.83		27.41	- 5.42
25. 3.83	23.87		27.35	- 1.52
3. 6.83	28.44		28.05	- 0.39
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
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
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
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

Contd.....

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
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
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
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
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
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
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
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
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

Contd.....

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
6. 6.86	22.45	11.30	- 11.15
13. 6.86	22.43	11.15	- 11.28
20. 6.86	22.39	10.91	- 11.48
27. 6.86	22.33	10.51	- 11.82
5. 9.86	23.05	13.79	- 9.26
12. 9.86	23.02	13.56	- 9.46
19. 9.86	22.86	12.96	- 9.93
26. 9.86	22.93	13.02	- 9.91
5.12.86	22.78	13.80	- 8.98
12.12.86	22.77	13.80	- 8.97
19.12.86	22.77	14.83	- 7.94
26.12.86	23.30	15.91	- 7.40
6. 3.87	17.94	16.98	- 0.96
13. 3.87	17.94	16.86	- 1.08
20. 3.87	17.83	17.41	- 0.42
27. 3.87	17.83	17.48	- 0.35
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
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
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
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

Contd.....

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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
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
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
30. 9.88	17.51	11.08	-6.43
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
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
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
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
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
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.

Contd.....

WEEK ENDING	OPEC'S WEIGHTED AVERAGE OFFICIAL PRICE	Spot Assessment	DIFFERENCE (+) Premium (-) Discount
6. 4.90	17.48	16.28	-1.20
12. 4.90	17.46	14.55	-2.92
20. 4.90	17.28	13.99	-3.29
27. 4.90	17.26	14.88	-2.38
4. 5.90	16.79	14.76	-2.03
11. 5.90	16.76	14.75	-2.01
18. 5.90	16.75	15.36	-1.39
1. 6.90	16.79	13.59	-3.20
8. 6.90	16.77	13.40	-3.36
15. 6.90	16.76	13.37	-3.39
22. 6.90	16.73	12.97	-3.76
29. 6.90	16.75	13.38	-3.37
6. 7.90	15.91	13.58	-2.33
13. 7.90	15.93	13.90	-2.03
20. 7.90	15.94	15.64	-0.30
27. 7.90	15.94	15.64	-0.30
3. 8.90	16.62	17.93	1.31
10. 8.90	17.09	23.60	6.51
17. 8.90	16.90	23.96	7.06
24. 8.90	17.24	28.92	11.68
31. 8.90	17.24	27.15	9.93
7. 9.90	17.25	27.53	10.28
14. 9.90	17.27	28.29	11.02
21. 9.90	20.35	32.13	11.78
28. 9.90	20.42	36.54	16.11
19.10.90	24.76	34.61	9.85
26.10.90	24.72	28.68	3.96
2.11.90	24.75	31.96	7.22
9.11.90	25.21	29.76	4.54
16.11.90	25.21	29.76	4.54
21.11.90	25.16	27.56	2.40
29.11.90	25.18	30.03	4.86
7.12.90	23.86	26.07	2.21
14.12.90	23.71	24.54	0.83
21.12.90	23.72	24.59	0.88
28.12.90	23.72	24.49	0.77
04. 1.91	22.27	24.15	1.88
11. 1.91	22.27	23.17	0.91
18. 1.91	22.27	23.52	1.25
25. 1.91	22.22	17.50	-4.72
01. 2.91	22.22	17.85	-4.37
8. 2.91	19.80	17.24	-2.56
15. 2.91	19.81	17.36	-2.45
22. 2.91	18.89	15.14	-3.76
1. 3.91	18.88	15.09	-3.80
8. 3.91	17.58	16.77	-0.81
15. 3.91	17.58	16.35	-1.23
22. 3.91	17.61	16.23	-1.38
28. 3.91	17.60	16.00	-1.61

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

Source: Platt's Oil Grams.

DEVELOPMENT OF CRUDE PETROLEUM PRICES (FOB) 1990-91
(Official Selling Prices) (US $/bbl.FOB)

Crude	Country	April-June 1990	July-Sept. 1990	Oct.-Dec. 1990	Jan-March 1991
Arab Light	Saudi Arabia	14.44	23.56	28.27	17.06
Arab Medium	Saudi Arabia	13.41	22.14	26.33	15.26
Arab Heavy	Saudi Arabia	12.99	21.76	24.44	12.95
Berri	Saudi Arabia	15.59	24.51	29.72	18.56
Iran Light	Iran	14.21	23.56	28.06	16.83
Iran Heavy	Iran	13.46	22.71	27.29	15.95
Basrah Light	Iraq	14.05	23.58	0.00	0.00
Basrah Medium	Iraq	0.00	0.00	0.00	0.00
Basrah Heavy	Iraq	0.00	0.00	0.00	0.00
Kirkuk	Iraq	14.21	23.68	0.00	0.00
Kuwait	Kuwait	13.37	20.92	0.00	0.00
Murban	Abu Dhabi	15.24	24.49	29.37	17.18
Dukhan	Qatar	14.91	24.26	28.81	17.23
Khafji	Neutral Zone	12.97	21.76	24.41	13.01
Es Sider	Libya	15.67	26.19	32.05	20.28
Bonny Light	Nigeria	16.60	26.52	33.10	21.25
Bonny Medium	Nigeria	16.04	26.67	32.47	20.67
Saharan	Algeria	16.40	27.19	34.02	22.00
Mandji	Gabon	13.04	23.93	28.33	17.04
Oriente	Ecuador	13.65	24.08	28.99	16.44
TJ Light	Venezuela	13.17	24.84	30.33	19.62
TJ Medium	Venezuela	12.97	20.96	26.89	15.83
Bachaquero	Venezuela	9.62	16.57	23.00	12.37
Sumatran	Indonesia	16.03	24.29	32.01	20.74
Attaka	Indonesia	16.66	24.98	33.13	21.01
OPEC Average		14.34	23.79	28.98	17.43
Persian Gulf		13.60	22.99	28.07	16.05

COUNTRY EXPORT SHARES
(percentages)

Saudi Arabia	23.48	30.00	36.98	36.20
Iran	11.51	13.00	13.56	14.21
Iraq	14.20	6.00	0.00	0.00
Kuwait	8.58	3.00	0.00	0.00
UAE	9.43	10.00	9.94	10.35
Qatar	1.78	2.00	1.75	1.67
Neutral Zone	1.69	2.00	1.09	0.18
Libya	5.80	7.00	6.70	6.56
Nigeria	7.14	9.00	8.31	8.31
Algeria	2.96	3.00	3.50	3.50
Gabon	1.15	1.00	1.30	1.31
Ecuador	0.95	1.00	1.27	1.31
Venezuela	7.97	9.00	9.87	10.64
Indonesia	3.33	4.00	5.79	5.76

Source: The World Bank/International Finance Corporation - OFFICE MEMORANDUM Dated 18 April, 1991.

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

(US $ barrel)

Month	Arab Light 34	Arab Heavy 27	Iran Light 33.9	Kuwait (Export) 31	Iraq Basrah 34	UAE Murban 39.10	Qatar 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.

Contd.....

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

(US $/barrel)

Month	Arab Light 34	Arab Heavy 27	Iran Light 33.9	Kuwait (Export) 31	Iraq Basrah 34	UAE Murban 39.10	Qatar Dukhtar 10
1989							
April	17.74	16.49	17.48	16.63	-	-	-
May	16.24	15.00	16.12	15.25	-	-	-
June	15.96	14.71	15.86	15.13	-	-	-
July	16.03	14.63	15.89	15.10	-	-	-
August	15.46	14.11	15.34	14.61	-	-	-
September	16.10	14.73	16.00	15.25	-	-	-
October	16.73	15.48	16.59	16.10	-	-	-
November	16.77	15.52	16.53	15.76	-	-	-
December	17.80	16.55	17.64	16.71	-	-	-
1990							
January	18.32	17.27	18.05	17.27	-	-	-
February	17.58	16.23	17.33	16.40	-	-	-
March	16.51	15.18	16.20	15.39	-	-	-
April	14.61	13.14	14.44	13.58	-	-	-
May	14.63	13.19	14.35	13.59	-	-	-
June	13.14	11.64	12.78	11.98	-	-	-
July	14.81	13.03	14.53	13.25	-	-	-
August	24.13	22.33	24.31	20.13	-	-	-
September	30.10	28.30	30.16	-	-	-	-
October	31.85	28.65	32.01	-	-	-	-
November	28.50	24.50	28.23	-	-	-	-
December	24.19	20.19	23.74	-	-	-	-
1991							
January	20.70	16.70	20.20	-	-	-	-
February	15.31	11.26	15.11	-	-	-	-
March	15.94	11.84	15.89	-	-	-	-

Source: Monthly OPEC Bulletins.

DEVELOPMENT OF SPOT PRICES OF MAJOR PETROLEUM PRODUCTS IN KEY TRADING CENTRES OF THE WORLD DURING 1990-91

(US Dollar/bbl)

Product/Type	As on 1990					1991			Change
	26/10	9/11	23/11	7/12	21/12	4/1	18/1	1/2	26/10/90 -1/2/91
1	2	3	4	5	6	7	8	9	10
I. GASOLINE									
1. New York Unl.	38.12	38.01	34.86	27.83	27.41	26.62	24.36	26.46	-11.66
2. NWE Prem.0.15	44.32	40.79	36.42	30.61	30.13	30.49	27.67	30.19	-14.13
3. Med Prem.0.4	41.13	37.41	33.15	28.13	28.37	28.84	25.88	28.96	-12.17
4. Sing Prem.0.15	40.50	38.50	36.00	34.25	33.25	32.50	32.75	33.60	- 6.90
II. NAPHTHA									
1. US Gulf	38.33	38.12	34.76	26.30	26.25	26.83	25.99	25.67	-12.64
2. Caribbean	33.39	36.33	32.66	25.20	24.31	23.52	21.84	NR	NR
3. NW Europe	36.66	35.19	33.77	28.55	30.14	29.97	28.04	27.01	- 9.65
4. Mediterranean	35.75	33.83	32.41	26.79	29.06	28.15	26.11	24.91	-10.84
5. Arabian Gulf	33.94	30.65	30.87	28.15	27.87	27.70	26.45	26.90	- 7.04
6. Singapore	33.00	31.00	30.00	28.25	28.25	27.50	27.75	30.00	- 3.00
III. JET KEROSENE									
1. New York	46.62	44.10	39.90	35.70	34.97	29.72	27.20	29.82	-16.80
2. US Gulf	45.68	43.00	37.01	34.70	33.60	29.09	25.88	27.46	-18.22
3. Caribbean	43.05	41.79	37.80	34.23	31.50	27.72	23.73	NR	NR
4. NW Europe	52.74	47.77	41.48	37.40	37.40	35.05	34.80	39.50	-13.24
5. Mediterranean	52.54	45.87	39.95	35.88	36.13	33.46	34.16	39.38	-13.16
6. Arabian Gulf(a)	55.40	46.85	36.85	32.85	31.85	32.70	37.20	49.00	- 6.40
7. Singapore (a)	58.50	50.75	36.55	35.25	34.25	34.75	36.50	46.50	-12.00
IV. GAS OIL									
1. New York	36.86	37.59	37.28	34.13	33.23	28.88	26.67	27.30	- 9.56
2. US Gulf	35.81	36.70	36.49	32.50	31.82	27.67	24.78	26.41	- 9.40
3. Caribbean	33.39	35.91	35.18	32.34	30.24	26.67	22.89	NR	NR
4. NW Europe	42.16	42.83	40.35	37.00	35.25	32.10	33.11	35.59	- 6.57
5. Mediterranean	41.76	42.43	39.88	36.53	34.99	35.25	32.24	35.92	- 5.84
6. Arabian Gulf	40.00	39.55	34.05	31.65	32.35	32.55	35.00	45.00	5.00
7. Singapore	43.00	42.45	36.55	34.05	34.75	34.75	35.00	44.50	1.50
V. 1%S RESIDUAL FUEL									
1. New York	24.50	24.88	24.63	24.25	23.25	22.38	17.25	15.88	- 8.62
2. US Gulf	24.75	24.25	21.75	19.88	20.25	19.75	15.50	12.75	-12.00
3. NW Europe	24.19	22.95	24.26	24.03	23.33	23.26	19.84	15.12	- 9.07
4. Mediterranean	24.03	23.18	23.95	23.57	22.87	23.02	19.22	14.65	- 9.38
VI High S.Residual Fuel									
1. New York (3.0%S)	20.00	20.75	21.25	21.75	19.00	18.38	14.75	13.38	- 6.62
2. US Gulf (3.0%S)	19.12	20.25	19.25	18.50	17.30	17.30	13.50	10.00	- 9.12
3. Caribbean (2.8%S)	18.75	19.38	19.75	20.50	18.38	17.13	14.25	NR	NR
4. NW Europe (3.5%S)	21.15	20.44	21.39	21.94	22.18	21.70	18.14	13.15	- 8.00
5. Med. (3.5%S)	19.65	23.69	19.57	22.02	22.02	21.70	17.03	11.72	- 7.93
6. Arab. Gulf 180cst	21.92	20.85	20.08	18.62	20.69	22.23	21.85	18.08	- 3.84
7. Singapore 180cst	23.64	22.25	21.32	20.16	22.25	23.80	24.03	21.32	- 2.32
380cst	22.42	21.02	20.55	19.38	21.48	23.05	23.44	20.70	- 1.72

a = Kerosene. NR = Not reported

SOURCE Various issues of Oil Industry Development Report 1990-91.

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
1.1.91	70.0	114.0	108.0	104.0	108.0	N.R.	92.0	N.R.	22.00

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

WORLD SURVEY OF SELECTED PETROLEUM PRODUCTS PRICES 1990

Country	US $ Exchange Rates in National Currencies	Gasoline (US$/litre)	Automotive Oil (US$/litre)	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	1.28	NA	NA	NA	NA	NA
Austria	11.39	0.904	0.632	NA	425.81	NA
Belgium	33.50	0.912	0.527	123.75	254.67	217.66
Canada	1.16	0.496	0.435	110.24	300.65	201.94
Denmark	6.20	1.013	0.305	148.71	676.13	270.48
Finland	3.83	1.071	0.787	166.87	334.20	277.39
France	5.45	0.981	0.567	130.73	411.10	NA
Germany	1.62	0.791	0.540	142.79	296.94	260.48
Greece	158.17	0.727	0.308	159.75	331.13	307.64
Ireland	0.61	1.033	0.711	152.54	410.56	295.85
Italy	1200.33	1.233	0.691	187.56	777.74	653.55
Japan	145.65	0.858	0.508	186.68	311.91	NA
Luxembourg	33.50	0.681	0.394	130.42	264.12	249.16
Netherlands	1.82	0.959	0.498	183.74	375.16	NA
New Zealand	1.68	0.545	0.361	242.11	NA	249.89
Norway	6.27	1.018	0.380	309.81	399.04	332.22
Portugal	142.63	0.959	0.608	180.16	631.00	607.64
Spain	102.48	0.807	0.543	142.22	379.59	338.91
Sweden	5.93	1.103	0.667	370.66	566.27	430.69
Switzerland	1.40	0.784	0.769	161.57	259.05	237.45
UK	0.57	0.788	0.618	139.28	256.84	NA
USA	1.00	0.307	0.310	109.33	282.40	205.53

Source : International Energy Agency-Energy prices and taxes. Fourth quarter,1990.

CONSUMER/RETAIL PRICES OF PETROLEUM PRODUCTS IN SELECTED DEVELOPED & DEVELOPING COUNTRIES OF THE WORLD DURING NOVEMBER 1990

COUNTRY	Motor Spirit	Kero-sene	HSDO	LDO	F.O.	ATF	LPG (Domestic) (Rs/Kg.)	Exchange Rate adopted/used
	(----------Rs./Litre----------)							
1.	2.	3.	4.	5.	6.	7.	8.	9.
A. DEVELOPED COUNTRIES								
1. Japan (Tokyo)	19.42	9.61	11.63	12.03	NA	-	5.60	Yen 7.31 = Re 1
2. Yugoslaviya (Belgrade)	13.56	NA	12.13	NA	6.42	5.78	NA	Dinar 0.7007 = Re 1
3. Switzerland (Berne)	16.26	NA	16.82	NA	-	-	4.10	SF 1 = Rs. 13.90
B. DEVELOPING COUNTRIES								
1. Argentina (Buneous Aires)	17.40	7.04	8.24	8.10	4.57	6.14	4.02	A 390.62 = Re 1
2. Bangla Desh (Dhaka)	7.78	7.29	7.29	NA	3.85	NA	8.07	Tk 1.92 = Re 1
3. India (New Delhi)	9.84	2.25	4.08	3.40	3.25		4.06	
4. Korea (Seoul)	17.78	7.70	6.50	6.50	6.40	NA	15.64	Won 28 = Re 1
5. Malaysia (Kaula Lumpur)	6.69	4.49	4.11	-	-	6.75	7.44	M$ 0.1585= Re 1
6. Thailand (Bangkok)	6.64	5.59	5.39	-	2.50	6.90	7.38	Baht 1.56= Re 1
7. Phillipines (Manila)	5.45	4.00	4.00	NA	NA	6.67	6.33	Peso 1.5587= Re 1
8. Srilanka (Colombo)	19.29	5.66	7.07	8.36	4.02	-	11.13	SL Re 1.555 = Re 1
9. Burma (Rangoon)	7.19	9.75	7.58	NA	6.07	9.75	9.18	US$ 1 = Rs 16.40
10. Egypt (Cairo)	3.31	0.60	0.54	N.A.	N.A.	N.A.	N.A.	Piastres 100 = Rs.6.02
India (New Delhi) price as on 1.4.91	12.23	2.77	5.05	4.22	4.03		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	1985	1986	1987	1988@	1989@@	1990@@	1991@@
1.	2.	3.	4.	5.	6.	7.	8.	9.
Australia								
Perth	114.88	114.02	87.02	100.94	105.11	N.A.	N.A	N.A.
Sydney	114.88	114.02	82.02	100.94	105.11	N.A.	N.A.	N.A.
Bahrain	153.40	148.46	120.00	120.00	120.00	N.A.	N.A.	N.A.
Belgium								
Brussels	159.00	128.00	105.00	115.00	115.00	N.A.	N.A.	N.A.
Egypt								
Cairo	155.20	121.13	105.00	87.00	93.00	71.49	74.93	119.10
Ethopia								
Addisababa	156.06	150.32	146.66	115.29	96.09	N.A.	N.A.	N.A.
France								
Paris	147.90	117.24	138.29	100.59	124.89	61.61	66.24	73.37
Germany								
Frankfurt	147.32	107.69	112.84	110.90	119.10	63.20	67.96	74.95
Holland								
Amsterdam	142.60	115.00	120.00	120.00	120.00	61.20	65.22	68.95
Italy								
Rome	165.00	135.00	135.00	125.24	138.71	61.58	68.48	75.81
Kenya								
Nairobi	144.00	168.10	157.61	163.00	160.00	N.A.	N.A.	N.A.
Lebanon								
Beirut	185.00	165.00	165.00	100.00	100.00	N.A.	N.A.	N.A.
Malaysia								
Kualalumpur	137.00	135.00	135.00	135.00	135.00	N.A.	N.A.	N.A.
Mauritius								
Plaisance	140.00	126.00	125.00	60.00	74.46	N.A.	N.A.	N.A.
Singapore								
Paya Iebar /Changi	137.00	128.50	128.50	90.00	90.00	51.34	63.10	69.07
Switzerland								
Geneva	155.73	105.58	118.94	118.93	118.15	62.90	67.93	70.51
U.A.E.								
Abu Dhabi	154.88	100.45	73.28	65.44	69.11	73.48	78.11	99.31
Sharjah/Dubai	154.88	147.58	119.93	99.98	109.95	N.A.	N.A.	N.A.
UNITED KINGDOM								
London (H)	154.76	129.89	132.14	136.41	182.17	61.95	66.37	72.71
Karachi	123.28	175.50	175.50	175.50	154.50	N.A.	N.A.	N.A.
Kuwait	113.96	98.15	82.44	70.59	72.73	N.A.	N.A.	N.A.
New York(2)	112.00	77.75	59.87	49.10	60.80	62.96	64.98	65.00
Tehran(1)	100.96	122.13	116.23	135.44	N.A.	N.A.	N.A.	N.A.
Tokyo								
Narita	118.96	95.00	86.76	60.00	100.00	78.31	85.65	95.49
Bombay	145.22	106.07	105.75	101.39	101.84	89.90	89.59	128.22
Delhi								
Palam	150.22	108.92	108.75	104.10	104.57	91.82	91.28	133.31

(1) Monopoly Price (2) Air India Contract Price.
@ = As on Ist January, 1988.
@@= Relates to average price.
NA= Not Available

International Petroleum Price Index (US $/barrel)
during 1984-1991

(1985=100)

Year	Petroleum Spot				
	Average Crude Price	Dubai Fateh	U.K Brent	Alaskan North Slope	West Texas Interme-diate
1984	104.7	103.9	105.4	105.2	104.4
1985	100.0	100.0	100.0	100.0	100.0
1986	51.2	49.4	53.1	51.2	53.7
1987	65.9	64.0	67.1	66.6	68.1
1988	52.5	50.0	54.8	52.5	56.7
1989	63.7	59.4	66.7	65.0	69.6
1990	81.7	77.3	87.8	81.1	86.9
1991 January	79.5	73.3	86.5	78.5	87.8
February	61.8	54.6	71.0	59.7	73.0

Source: International Financial Statistics Year Book April 1991.

International Petroleum Spot Prices (US $ / barrel) during 1984 - 1991.

Year	Petroleum Spot				
	Average Crude Price	Dubai Fateh	U.K Brent	Alaskan North Slope	West Texas Interme-diate
1984	-	27.49	28.80	28.54	29.38
1985	-	26.46	27.33	27.14	28.14
1986	13.82	13.08	14.50	13.89	15.10
1987	17.79	16.94	18.34	18.08	19.16
1988	14.15	13.22	14.97	14.26	15.96
1989	17.19	15.70	18.22	17.65	19.60
1990	22.05	20.46	23.99	22.03	24.45
1991 January	21.45	19.40	23.65	21.30	24.70
February	16.68	14.45	19.40	16.20	20.55

Source: = International Financial Statistics Year Book April 1991.

WORLD TANKER FLEET BY FLAG 1981 TO 1986

(Million dwt)

FLAG	1981	1982	1983	1984	1985	1986	% age change 1986 over 1985	% age 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	% age change 1986 over 1985	% age 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	% age change 1986 over 1985	% age 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 1990

(Million Tonnes)

From \ To	U.S.A	Canada	Latin America	W.Europe	Africa	Asia @	Japan	Austra lasia	Rest of World	Destination not known*	Total
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
USA	-	4.7	15.0	10.3	0.2	6.0	4.6	1.0	0.8	0.4	43.0
Canada	45.9	-	-	0.2	-	0.4	0.3	-	-	0.3	47.1
Latin America	128.5	4.0	-	27.9	-	1.3	8.0	0.1	-	15.4	185.2
Western Europe	26.7	17.5	0.4	-	2.7	0.4	0.5	0.2	6.4	24.3	79.1
Middle East	100.4	3.8	8.2	198.8	17.5	153.7	160.7	12.3	20.2	28.0	703.6
North Africa	15.5	0.4	-	101.6	-	0.1	0.8	-	10.2	-	128.6
West Africa	57.1	2.5	-	42.6	8.0	0.6	0.9	-	-	-	111.7
East & Southern Africa	1.2	-	-	-	-	-	-	-	-	-	1.2
South Asia	1.4	-	-	0.3	-	2.1	0.1	-	0.1	-	4.0
Other Asia **	9.0	-	0.9	0.3	-	0.2	45.1	4.8	-	13.4	73.7
Japan	-	-	-	-	-	3.5	-	-	-	-	3.5
Australasia	2.6	-	-	0.2	-	0.9	1.4	-	-	5.0	10.1
USSR, C.Europe & China	6.8	0.2	12.7	100.6	1.6	15.6	15.6	0.4	63.0	4.8	221.3
Total Imports	395.1	33.1	37.2	482.8	30.0	184.8	238.0	18.8	100.7	91.6	1612.1

@: Excluding China and Japan. ** : Excluding China, Japan and South Asia.

* 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,1991.

WORLD PRIMARY ENERGY CONSUMPTION BY FUEL* - 1990.
(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	778.9	490.5	476.5	156.0	72.0	1973.9
Canada	74.8	55.0	28.9	16.5	63.7	238.9
Total North America	853.7	545.5	505.4	172.5	135.7	2212.8
LATIN AMERICA :						
Total Latin America	254.8	78.9	23.0	1.3	112.3	470.3
WESTERN EUROPE :						
Austria	10.7	5.0	3.5	-	8.1	27.3
Belgium & Luxembourg	24.1	8.3	9.9	9.9	0.1	52.3
Denmark	8.8	1.9	5.3	-	-	16.0
Finland	10.9	2.3	3.3	4.5	2.7	23.7
France	88.7	25.1	18.8	61.1	11.2	204.9
Germany	126.2	53.2	126.5	33.0	3.7	342.6
Greece	14.5	0.1	8.4	-	0.6	23.6
Iceland	0.7	-	0.1	-	0.9	1.7
Republic of Ireland	4.4	1.4	2.1	-	0.2	8.1
Italy	92.3	39.3	15.7	-	7.7	155.0
Netherlands	34.2	30.4	8.9	0.8	-	74.3
Norway	9.2	-	0.6	-	23.8	33.6
Portugal	11.0	-	0.8	-	0.8	12.6
Spain	48.1	5.0	19.9	11.5	5.7	90.2
Sweden	15.0	0.6	1.6	15.8	17.7	50.7
Switzerland	12.8	1.3	0.4	5.8	7.9	28.2
Turkey	23.8	0.3	22.1	-	5.1	51.3
United Kingdom	82.4	48.8	64.1	14.2	1.5	211.0
Total Western Europe	617.8	223.0	312.0	156.6	97.7	1407.1
USSR & Central Europe						
USSR	402.6	568.0	275.5	43.5	55.9	1345.5
Central Europe	79.4	68.5	163.5	14.5	13.8	339.7
Total USSR & C Europe	482.0	636.5	439.0	58.0	69.7	1685.2
Cyprus/Gibraltar/Malta	2.7	-	0.1	-	-	2.8
Middle East						
Total Middle East	146.3	89.6	2.7	-	2.6	241.2
Africa						
Total Africa	93.9	32.9	75.6	2.7	19.7	224.8
Asia						
China	113.4	13.2	518.9	-	31.5	677.0
Indonesia	30.9	7.7	3.5	-	1.8	43.9
Japan	245.0	45.4	75.0	48.9	21.4	435.7
Malaysia	10.5	7.4	0.6	-	1.2	19.7
Philippines	11.5	-	0.8	-	1.3	13.6
Singapore	19.5	-	-	-	-	19.5
South Korea	48.5	2.9	25.6	13.2	1.6	91.8
Taiwan	26.2	1.3	12.8	6.3	1.6	48.2
Thailand	19.3	5.6	2.9	-	1.5	29.3
Other Asia	89.4	27.6	153.0	1.6	30.9	302.5
Total Asia	614.2	111.1	793.1	70.0	92.8	1681.2
Australasia						
Australia	31.3	16.5	39.5	-	4.0	91.3
New Zealand	4.7	4.1	1.7	-	6.1	16.6
Total Australasia	36.0	20.6	41.2	-	10.1	107.9
TOTAL WORLD	3101.4	1738.1	2192.1	461.1	540.6	8033.3
Of which OECD & LDCs	2485.4	1088.4	1193.3	403.1	430.2	5600.4
Of which OECD	1752.5	834.5	933.6	378.0	264.9	4163.5

* In this Review, 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, 1991.

ESTIMATED PER CAPITA PRIMARY ENERGY CONSUMPTION-SOME INTERNATIONAL COMPARISONS (1990).

(Kgm.Oil Equivalent)

Country/Area	Oil	Natural Gas	Coal	Nuclear Energy	Water Power	Total
1.	2.	3.	4.	5.	6.	7.
NORTH AMERICA	3104	1984	1838	627	493	8047
U.S.A.	3131	1972	1915	627	289	7935
Canada	2853	2098	1102	629	2429	9111
Western Europe	1490	538	753	378	236	3394
Austria	1404	656	459	-	1063	3583
Belgium &Luxembourg	2410	830	990	990	10	5230
Denmark	1715	370	1033	-	-	3119
Finland	2198	464	665	907	544	4778
France	1579	447	335	1088	199	3648
Greece	1446	10	837	-	60	2353
Iceland	2800	-	400	-	3600	6800
Republic of Ireland	1254	399	598	-	57	2308
Italy	1605	683	273	-	134	2695
Netherlands	2306	2050	600	54	-	5010
Norway	2175	-	142	-	5626	7943
Portugal	1068	-	78	-	78	1223
Spain	1239	129	513	296	147	2324
Sweden	1765	71	188	1859	2082	5965
Switzerland	1925	195	60	872	1188	4241
Turkey	433	5	402	-	93	933
United Kingdom	1441	853	1121	248	26	3689
Germany	2036	858	2041	532	60	5527
Asia						
China	102	12	465	-	28	608
Japan	1990	369	609	397	174	3539
India*	73	14	155	1	6	249
South Korea	1149	69	607	313	38	2175
Australasia	1789	1024	2048	-	502	5363
Australia	1862	982	2350	-	238	5431
New Zealand	1420	1239	514	-	1843	5015
Total World	595	334	421	89	104	1543

SOURCE :i) BP Statistical Review of the World Energy June, 1991.
ii) World Development Report 1991 for population Projections .
* Eslimated on the basis of financial year data.

ESTIMATED PER CAPITA CONSUMPTION OF MAIN PETROLEUM PRODUCTS-SOME INTERNATIONAL COMPARISONS (1990)

Kg./per capita

Country/Area	Gasoline	Middle Distillates	Fuel	Others*	Total
1.	2.	3.	4.	5.	6.
U.S.A.	1313	922	267	629	3131
Canada	1019	885	344	607	2855
W.Europe	382	600	265	251	1498
Japan	421	690	529	351	1991
Australasia	717	647	124	303	1791
India	4	40	11	14	69
OECD.	747	774	327	421	2269

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

SOURCES: 1. BP Statistical Review of World Energy June, 1991.
2. World Development Report, 1991 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	Nuclear 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
1990	3101.4	1738.1	2192.1	540.6	461.1	8033.3

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

PRIMARY ENERGY* CONSUMPTION IN SELECTED COUNTRIES/AREAS OF THE WORLD - 1980, 1985, 1988, 1989 and 1990.
(Million Tonnes Oil eqvt.)

COUNTRY/AREA	1980	1985	1988	1989	1990 (P)	% Change 1990 over 1989	% share of total 1990
1.	2.	3.	4.	5.	6.	7.	8.
NORTH AMERICA							
USA	1836.0	1792.3	1935.8	1969.2	1973.9	+ 0.2	24.6
Canada	226.1	222.8	245.9	248.0	238.9	- 3.7	3.0
Total North America	2062.1	2015.1	2181.7	2217.2	2212.8	- 0.2	27.6
Latin America							
Total Latin America	349.9	393.4	436.2	453.4	470.3	+ 3.7	5.9
WESTERN EUROPE:							
Austria	26.4	25.3	26.6	26.7	27.3	+ 2.3	0.3
Belgium & Luxembourg	50.5	48.1	51.8	53.2	52.3	- 1.7	0.7
Denmark	19.5	18.4	18.0	16.4	16.0	- 2.3	0.2
Finland	21.5	22.6	24.0	23.8	23.7	- 0.8	0.3
France	189.3	188.5	197.1	202.3	204.9	+ 1.3	2.6
Germany	354.6	359.8	359.8	351.7	342.6	- 2.6	4.3
Greece	17.3	19.0	21.8	23.6	23.6		0.3
Iceland	1.9	1.5	1.6	1.7	1.7	+ 1.6	+
Republic of Ireland	8.5	8.4	8.8	8.0	8.1	+ 1.2	0.1
Italy	145.7	139.6	151.8	153.9	155.0	+ 0.7	1.9
Netherlands	73.7	69.7	74.3	74.3	74.3		0.9
Norway	30.4	32.0	33.1	33.0	33.6	+ 1.8	0.4
Portugal	11.3	10.7	12.0	12.5	12.6	+ 0.8	0.2
Spain	76.5	77.9	83.1	88.3	90.2	+ 2.3	1.1
Sweden	48.0	53.5	53.1	51.5	50.7	- 1.4	0.6
Switzerland	26.6	28.6	28.8	27.0	28.2	+ 4.4	0.4
Turkey	24.5	31.0	49.6	52.1	51.3	- 1.5	0.6
United Kingdom	203.8	202.1	207.9	209.2	211.0	+ 0.9	2.6
Total Western Europe	1330.0	1336.7	1403.2	1409.2	1407.1	- 0.1	17.5
USSR & Central Europe							
USSR	1132.9	1288.8	1389.9	1381.3	1345.5	- 2.6	16.8
Central Europe	371.2	375.7	390.0	384.0	339.7	-11.5	4.2
Total USSR & Europe	1504.1	1664.5	1779.9	1765.3	1685.2	- 4.5	21.0
Cyprus/Gibraltar/Malta	1.5	2.0	2.6	2.6	2.8	+ 7.6	+
Middle East							
Total Middle East	137.8	185.2	220.7	229.1	241.2	+ 5.2	3.0
Africa							
Total Africa	157.8	193.6	211.9	219.1	224.8	+ 2.6	2.8
Asia							
China	428.7	541.9	616.2	652.8	677.0	+ 3.7	8.4
Indonesia	23.3	28.9	34.9	39.1	43.9	+12.6	0.6
Japan	359.6	374.4	404.7	420.0	435.7	+ 3.7	5.4
Malaysia	9.2	12.9	16.2	18.0	19.7	+ 9.9	0.3
Philippines	11.9	9.9	12.2	13.1	13.6	+ 3.1	0.2
Singapore	9.5	11.8	16.5	18.9	19.5	+ 3.4	0.2
South Korea	39.3	52.0	75.2	80.9	91.8	+13.5	1.1
Taiwan	23.1	33.1	43.4	45.2	48.2	+ 6.9	0.6
Thailand	12.3	16.1	22.8	25.7	29.3	+14.0	0.3
Other Asia	185.5	229.7	274.0	289.3	302.5	+ 4.5	3.8
Of which India **	106.6	153.9	193.3	208.0	213.0	+ 2.4	2.7
Total Asia	1102.4	1310.7	1516.1	1603.0	1681.2	+ 4.8	20.9
Australasia							
Australia	71.8	78.9	83.7	89.0	91.3	+ 2.6	1.1
New Zealand	11.3	13.3	15.9	16.1	16.6	+ 3.1	0.2
Total Australasia	83.1	92.2	99.6	105.1	107.9	+ 2.7	1.3
TOTAL WORLD	6728.7	7193.4	7851.9	8004.0	8033.3	+ 0.4	100.0
Of which OECD & LDCs	4739.4	4926.1	5389.6	5517.2	5600.4	+ 1.5	69.7
Of which OECD	3834.8	3818.4	4089.2	4151.5	4163.5	+·0.3	51.8

* In this Review, 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.

\+ Less then 0.05. P : Provisional.

SOURCE: BP Statistical Review of World Energy June 1991.

NOTE : Figures for India Inserted.

** Estimated on the basis of financial year data.

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 Industrial 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	1980-95
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 1989

Country	Mid-Year Population 1989 (Million)	GNP 1989 (Bn.$)	Per capita GNP 1989($)	Oil exports 1989 (Bn.$)	Total exports FOB (Bn.$)	Oil exports as % of total exports	Oil reserves 1.1.90 (Bn.bbls)	Gas reserves 1.1.90 (Bn.CM)	Producing oil wells (Dec.89)	Refining capacity 1.1.90 (000 bbls/day)	Exports of products (000/bbls/day)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Algeria	24.58	47.42	1929	7.00	10.60	66.0	9.20	3250	915	474.5	393.3
Ecuador	10.49	9.55	911	1.15	2.35	48.7	1.51	112	865	135.1	23.0
Gabon	1.12	2.87	2560	1.20	1.60	75.0	1.78	14	278	20.0	1.6
Indonesia	178.18	85.04	477	5.72	21.64	26.4	11.05	2561	5804	751.3	230.8
I.R.Iran	53.96	194.50	3604	12.50	13.50	92.6	92.86	17000	645	766.0	38.0
Iraq	17.76	66.00	3717	14.50	14.60	99.3	100.00	3115	378	550.0	145.0
Kuwait	2.05	31.16	15200	10.86	11.38	95.4	97.13	1370	365	670.0	690.0
Libya	4.38	19.65	4485	7.50	7.75	96.8	22.80	1218	1060	342.0	127.5
Nigeria	128.33	21.01	164	8.70	9.73	89.4	16.00	2476	1855	400.5	30.0
Qatar	0.33	5.89	17846	2.00	2.16	92.6	4.50	4621	172	63.0	75.0
Saudi Arabia	14.43	78.82	5462	24.00	27.24	88.1	257.56	5222	580	1425.0	1072.6
U.A.E.	1.55	27.39	17669	11.50	15.58	73.8	98.11	5650	1147	162.0	155.0
Venezuela	19.25	41.14	2137	10.02	12.80	78.3	59.09	3022	13126	1167.0	617.7
TOTAL OPEC	456.41	630.44	1381	116.65	150.93	77.3	771.58 (76.7%)	49631 (38.3%)	27645*	6926.4 (9.4%)	3599.5 (29.5%)

* = Total includes figures for Saudi Arabian - Kuwaiti Divided Zone. (455)
Figures in brackets are OPEC's share to total world.
Source : OPEC Annual Bulletin 1989

PART – II
PLAN STATISTICS

1. SEVENTH PLAN

SEVENTH PLAN (1985-90) OUTLAY AND ACTUAL EXPENDITURE 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	Total 1985-90
1.	2.	3.	4.	5.	6.	7.	8.
A) EXPLORATION & PRODUCTION							
1. ONG Commission	8753	2123	2214	2041	2304	2921	11603
2. OIL India Ltd.	950	182	191	148	143	164	828
3. GAIL	950	253	593	421	315	219	1801
4. Ministry of PNG	--	18	11	51	43	49	172
SUB TOTAL (A)	10653	2576	3009	2661	2805	3353	14404
B) REFINING & MARKETING							
1. IOC	958	119	112	131	112	167	641
2. BPCL	366	65	89	123	69	45	391
3. HPCL	299	84	82	66	95	66.5	393.5
4. MRL	33	13	16	22	10	15	76
5. CRL	28	13	11	6	9	27	66
6. BR&PL	252	Neg.	Neg.	Neg.	-	Neg	-
7. Lubrizol India Ltd.	18	4	3	3	5	9	24
8. Engineers India Ltd.	21	5	4	8	4	1	22
9. IBP Co. Ltd.	--	--	--	--	--	0.50	0.50
SUB TOTAL (B)	1975	303	317	359	304	331	1614
C. Petrochemicals							
1. BR&PL	105	42	31	21	13	13	120
2. BPCL	17	4	3	4	2	Neg	13
3. CRL	57	7	5	26	30	15	83
4. IOC	24	--	--	--	--	6	6
5. HPCL	15	--	--	Neg.	--	2	2
6. MRL	25	6	7	6	5	1	25
7. GAIL	--	--	--	--	--	2	2
SUB TOTAL (C)	243	59	46	57	50	39	251
D. Engineering **							
1. IBP Co.Ltd. & Others	50	6	10	11	15	16	58
GRAND TOTAL (A+B+C+D)	12921	2944	3382	3088	3174	3739	16327

Note = Difference due to rounding off
** Excluding Bridge and 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	31.08	31.48	31.91	34.53	159.14
	(30.17)	(30.48)	(30.36)	(32.04)	(34.09)	(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	7.78	15.17	14.45	14.91	59.68
	(8.13)	(9.85)	(11.47)	(13.22)	(16.99)	(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)

1.	Unit	1984-85 (Actual)	(Plan Target)	1989-90 (Actual)	1990-91 (Actual)
	2.	3.	4.	5.	6.
1. Production of Crude Oil:					
(i) On shore	Million Tonnes	8.85	13.78	12.37	11.83
(ii) Offshore	" "	20.14	20.75	21.72	21.19
TOTAL	" "	28.99	34.53	34.09	33.02
2. Production of Natural gas					
(i) Onshore	Billion Cu.Metres	2.83	3.19	3.90	3.92
(ii) Offshore	" " "	4.41	11.72	13.09	14.08
TOTAL	" " "	7.24	14.91	16.99	18.00
3. Refining					
(i) Refining Capacity (At yr.end)	Million Tonnes	45.55	51.75	51.85	51.85
(ii) Crude throughput " " "	" "	36.56	48.04-48.89	51.94	51.77
(iii) Production of Petroleum Products	" "	33.51	45.06-45.47	48.69	48.57
4. Net Imports:					
(a) Quantity					
Crude Oil	" "	7.16	13.51-14.36	19.49	20.70
Petroleum products	" "	5.16	6.94- 7.20	3.97	6.01
TOTAL		12.32	20.45-21.56	23.46	26.71
(b) Value of crude oil & Petroleum Products import	Rs./Crores	3527	5136	5649	9775
5. Demand of petroleum products	Million Tonnes	38.80	52.00-52.67	54.10	55.04
6. LPG					
(i) Production	MMT	0.87	2.54	1.95	2.14
(ii) Number of Customers at year end	Lakhs	89.41	176.0	162.3	169.8
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 and 1990-91

(Million Tonnes)

	1979-80	1984-85	1985-86	1989-90	1990-91
A. CRUDE OIL					
1. Production	11.77	28.99	30.17	34.09	33.02
2. Imports	16.12	7.16	14.62	19.49	20.70
3. Availability (net)	27.89	36.15	44.79	53.58	53.72
4. Col(2) as percent of Col(3)	57.80	19.81	32.64	36.38	38.53
B. POL PRODUCTS					
1. Production	25.79	33.24	39.88	48.69	48.57
2. Imports	4.72	6.09	3.87	6.56	8.66
3. Availability (gross)	30.51	39.33	43.75	55.25	57.23
4. Col(2) as percent of Col(3)	15.47	15.48	8.85	11.87	15.13

Source: Seventh Five Year Plan.

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

(Rs./Crores)

YEAR	Value* of Crude and POL Products Imports
1984-85	3527
1989-90	5649
Seventh Plan Total	22259

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

PART – III
FINANCIAL PERFORMANCE/ STRUCTURE AND QUICK REVIEW

FINANCIAL REVIEW/STRUCTURE OF THE PUBLIC/JOINT SECTOR UNDERTAKINGS UNDER THE PURVIEW OF MINISTRY OF PETROLEUM & NATURAL GAS 1989-90, AND QUICK FINANCIAL REVIEW 1990-91.

FINANCIAL STRUCTURE/REVIEW 1990-91.

The financial structure of the Public Sector Undertakings for three years upto 1989-90 is given in the attached statements. The glossary of the terms used is given at the end. The Public Sector Undertakings have been divided into four categories viz., (A) Oil Exploration & Production (B) Refining and Marketing (C) Petrochemicals & (D) Engineering Units. In the review that follows, overall financial position of all the undertakings has been given followed by an analysis of the consolidated position under each of the above mentioned categories.

OVER ALL FINANCIAL POSITION.

(Rs./Crores)

Particulars	1987-88	1988-89	1989-90
1. Paid up Capital			
a. Ordinary	1775.03	1854.25	1890.16
b. Preference	0.50	0.50	0.50
Total paid up Capital	1775.53	1854.75	1890.66
2. Reserves & Surplus	10053.85	12723.46	15299.76
3. Loans	6501.77	8791.12	13654.94
4. Net Worth	11644.37	14164.48	16550.63
5. Capital employed	13279.21	16653.79	15964.58
5.1.Net Fixed Assets	8792.39	10347.96	10777.14
5.2.Working Capital	4486.82	6305.83	5187.44
6.1.Sales turnover	34207.92	37253.21	42325.05
6.2.Other Income	224.61	448.52	534.91
Total	34432.53	37701.73	42859.96
7. Adjusted gross profit	3610.38	3987.97	3995.34
8. Net profit	2179.89	2570.72	2903.09
9. Dividend Paid	97.31	126.94	156.85
10. Corporate Tax	797.14	764.10	764.48

CAPITAL INVESTMENT:

The Capital investment defined as the sum total of paid-up capital and loans has registered an increase of 46% from Rs. 10645.87 Crores in 1988-89 to Rs.15545.60 crores in 1989-90. The increase in the capital investment in 1989-90 was on account of increase in the paid up capital from Rs.1854.75 crores to Rs.1890.66 crores and loans from Rs. 8791.12 Crores, to Rs.13654.94 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	1989-90	1989-90	% Increase
1. Bharat Petroleum Corpn. Ltd.	27.85	50.00	79.5
2. Cochin Refineries Limited	66.48	68.91	0.6
3. IBP. Co. Ltd.	3.84	7.36	91.7
4. Madras Refineries Limited	113.99	114.13	0.1
5. Lubrizol India Ltd.	4.80	9.60	100.0
6. Balmer Lowrie Ltd.	4.02	8.69	116.2
7. Biecco Lawrie Ltd.	1.77	1.97	11.3

(B) LOANS

1. Oil & Natural Gas Commission	4657.09	5772.80	24.0
2. Oil India Limited	82.63	220.47	166.8
3. Indian Oil Crop. Ltd.	1969.17	5441.14	176.3
4. Hindustan Petroleum Corp. Ltd.	403.44	489.30	21.6
5. Madras Refineries Ltd.	169.15	189.13	11.8
6. Gas Authority of India Ltd.	753.54	863.80	14.6
7. IBP Co. Ltd.	28.00	33.50	19.6
8. Indian Oil Blending Ltd.	6.76	8.62	27.5
9. Lubrizol India Ltd.	507.00	18.87	272.0
10. Balmer Lawrie Ltd.	10.92	52.21	378.1
8. Biecco Lawrie Ltd.	41.36	47.82	15.6

The position of the foreign loans during three years 1987-88, 1988-89 & 1989-90 is given below:-

(Rs./Crores)

	1987-88	1988-89	1989-90
a) Foreign Loans	3620.28	5890.88	10333.69
b) Total Loans	6501.77	8791.12	13654.94
c) % of Foreign loans to Total loans	55.7	67.0	76.0

IOC and ONGC together accounts for 96% of total foreign loans outstanding on 31.3.90.

The loans/Paid up Capital ratio of all undertakings together increased from 4.74 in 1988-89 to 7.22 in 1989-90.

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) decreased by 4.1% from Rs.16653.79 crores in 1988-89 to Rs.15964.58 crores in 1989-90. The details of changes in Capital employed is given below :-

(A) NET FIXED ASSETS

(Rs./Crores)

Name of the Undertakings	1988-89	1989-90	% Increase
1. Oil and Natural Gas Commission	6642.48	6425.86	(-) 3.3
2. Oil India Limited	172.70	178.35	3.3
3. Gas Authority of India Ltd.	935.75	1243.81	32.9
4. Indian Oil Corpn. Ltd.	825.61	966.98	17.1
5. Bharat Petroleum Corpn.Ltd.	516.23	581.47	12.6
6. Hindustan Petroleum Corpn.Ltd.	542.87	631.79	16.4
7. Madras Refineries Ltd.	186.00	184.08	(-) 1.0
8. IBP Co. Ltd.	26.40	36.98	40.1
9. Lubrizol India Ltd.	17.19	17.76	3.3
10. Indian Oil Blending Ltd.	3.79	3.77	(-) 0.5
11. B.R.P.L.	264.57	247.34	(-) 6.5
12. Engineers India Ltd.	41.35	39.65	(-) 4.1
13. Balmer Lawrie Ltd.	16.40	20.21	23.2
14. Biecco Lawrie Ltd.	0.77	0.76	--
15. Cochin Refineries	128.81	198.19	53.9

(B) WORKING CAPITAL

1. Oil and Natural Gas Commission	2047.55	2512.58	22.7
2. Oil India Ltd.	245.88	264.76	7.7
3. Indian Oil Corpn.Ltd.	3150.03	1599.25	(-)49.2
4. Gas Authority of India Ltd.	(-) 00.53	(-)49.66	(-)92.7
5. Bharat Petroleum Corpn. Ltd.	228.07	76.18	(-)66.6
6. Cochin Refineries Ltd.	64.41	101.23	57.2
7. Madras Refineries Ltd.	138.14	152.05	10.1
8. Hindustan Petroleum Corp. Ltd.	183.50	264.72	44.3
9. Lubrizol India Ltd.	32.29	33.72	4.4
10. IBP Co. Ltd.	5.48	21.56	293.4
11.Indian Oil Blending Ltd.	3.27	(-) 0.02	(-)100.6
12.B.R.P.L.	99.43	85.63	13.9
13.Engineers India Ltd.	40.85	44.80	9.7
14.Balmer Lawrie Ltd.	38.10	54.76	43.7
15.ONGC Videsh Ltd.	27.71	22.91	17.3

SALES TURNOVER :

The sales turnover of all the Undertakings clubbed together increased by 13.6% from Rs.37253.21 crores in 1988-89 to Rs.42325.05 crores in 1989-90. The Company-wise share of sales-turnover showing the amount is as under :-

(Rs./Crores)

			% Share
1.	ONGC	8078.09	19.1%
2.	IOC	17476.60	41.3%
3.	BPCL	4881.69	11.5%
4.	HPCL	6048.18	14.3%
5.	Others	5840.49	13.8%
	Total	42325.05	100.0%

PROFITABILITY :

The adjusted gross profit which stood at Rs.3987.97 crores during 1988-89 increased to Rs.3995.34 crores in 1989-90. The adjusted gross profit expressed as a percentage of sales turnover went down from 10.7% in 1988-89 to 9.4% in 1989-90. The net profits have also gone up from Rs.2570.72 crores in 1988-89 to Rs.2903.09 crores in 1989-90. The net profit expressed as a percentage of paid-up Capital went up from 138.6% in 1988-89 to 153. 6% in 1989-90 while that of net profits to net worth went down from 18.1% to 17.5%. The return on capital employed, increased from 23.9% to 25.0%.

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.126.94 crores in 1988-89 to Rs.156.85 crores in 1989-90. The highest amount of dividend was paid by Oil & Natural Gas Commission which paid Rs.54.86 crores in 1989-90. The Indian Oil Corporation Limited paid a dividend of Rs.24.65 crores in 1989-90. 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 Corporate taxes was Rs. 764.48 Crores in 1989-90 as against Rs.764.10 crores in 1988-89.

(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

	1987-88	1988-89	1989-90
1. Paid up Capital	1236.17	1241.17	1241.17
2. Loans	3988.17	5493.26	6857.07
3. Net Worth	8642.07	10230.96	11503.07
4. Capital Employed	8560.72	10071.58	10598.75
4.1.Net Fixed Assets	6644.22	7750.97	7848.16
4.2.Working Capital	1916.50	2320.61	2750.59
5. Sales turnover	6644.50	7687.22	9372.06
6. Adjusted Gross Profit	2446.81	2513.18	2595.28
7. Net Profit	1503.17	1638.67	1738.73
8. Dividends	44.48	55.63	59.06
9. Corporate Tax	563.99	510.49	433.60

The sailent points of analysis are given as under:

(1) CAPITAL INVESTMENT

There has been an increase of 20.3% in the Capital investment from Rs.6734.43 crores in 1988-89 to Rs.8098.24 crores in 1989-90. 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)

	1988-89	1989-90	% Increase
1. Oil & Natural GAs Commission	4999.94	6115.65	22.3
2. Oil India Limited	110.63	248.47	124.6
3. Gas Authority of India ltd.	1598.86	1709.10	6.9

(2) CAPITAL EMPLOYED

The capital employed registered an increase of 5.2% from Rs. 10071.50 Crores in 1988-89 to Rs. 10598.75 Crores in 1989-90. 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

	1988-89	1989-90	% Increase
1. Oil India Limited	172.70	178.35	3.9
2. Gas Authority of India Ltd.	935.75	1243.81	32.9
3. ONGC Videsh Ltd.	0.04	0.14	250.0

B . Working Capital

1. Oil & Natural Gas Commission	2047.55	2512.58	22.7
2. Oil India Limited	245.88	264.76	7.7

(3) SALES TURNOVER

The sales trunover under this category went up from Rs.7687.22 crores in 1988-89 to Rs.9372.06 crores in 1989-90 showing an increase of 21.9%. The sales of Oil & Natural Gas Commission went up from Rs.6843.16 crores in 1988-89 to Rs.8078.09 crores in 1989-90 and that of Oil India Limited increased from Rs.516.67 crores to Rs.643.43 crores in the same period. There has also been an increase in the Sales Turnover of Gas Authority of India, from Rs.327.39 crores to Rs.650.54 crores in the same period.

(4) PROFITABILITY

The adjusted gross profit increased by 3.3% from Rs.2513.18 Crores in 1988-89 to Rs.2595.28 crores in 1989-90. The gross profits expressed as a %age of sales turnover decreased from 29.5% in 1988-89 to 27.7% in 1989-90. The ratio of gross profit to Capital employed declined from 24.9% to 24.5%. The ratios of net profit to paid up capital and net worth were 140.1% and 15.1% in 1989-90 against 132.0% and 16.0% Respectively in 1988-89.

(5) DIVIDEND

The dividend declared by ONGC and OIL has been going up continuously. During 1989-90 the dividend was Rs.59.06 crores as against Rs.55.63 crores in 1988-89.

(6) CORPORATE TAX

The contribution made by ONGC & OIL by way of taxes to the National exchequer has decreased from Rs.510.49 crores in 1988-89 to Rs.433.60 crores in 1989-90 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)

	1987-88	1988-89	1989-90
1. Paid up Capital	332.75	406.97	438.01
2. Loans	2362.20	3157.45	6644.61
3. Net Worth	2697.50	3592.59	4658.86
4. Capital Employed	4394.21	6079.09	4869.71
4.1.Net Fixed Assets	1959.93	2273.90	2621.02
4.2.Working Capital	2434.28	3805.19	2248.69
5.1.Sales turnover	26999.62	28952.28	32258.10
5.2.Other Income	191.76	290.28	433.49
Total	27191.38	29242.56	32691.59
6. Adjusted Gross Profit	1102.19	1412.56	1343.65
7. Net Profit	646.19	907.77	1131.58
8. Dividends	51.79	64.19	88.54
9. Corporate Tax	220.33	239.49	310.95

An analysis of the salient features is given below :

(1) CAPITAL INVESTMENT

During the year the capital investment increased by 98.7% from Rs.3564.42 crores in 1988-89 to Rs.7082.62 crores in 1989-90. The increase in 1989-90 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	1988-89	1989-90	% Increase
1. Cochin Refineries Limited	68.48	68.91	0.6
2. Bharat Petroleum Cor.Ltd.	27.85	50.00	79.5
3. Madras Refineries Ltd.	113.99	114.13	0.1
4. IBP Co. Ltd.	3.84	7.86	104.7
5. Lubrizol India Ltd.	4.80	9.60	100.0
(B) LOANS			
1. Indian Oil Corp.Ltd.	1969.17	5441.14	176.3
2. Hindustan Petroleum Co.Ltd.	403.44	489.30	21.3
3. Cochin Refineries Ltd.	125.88	142.56	13.3
4. Indian Oil Blending Ltd.	6.76	8.62	27.5
5. Madras Refineries Ltd.	169.15	189.13	11.8
6. IBP Co. Ltd.	13.74	33.50	143.8
7. Lubrizol India Ltd.	5.07	18.87	272.2

With the increase in the loans in 1989-90 the loans/paidup capital ratio has gone up from 7.8 in 1988-89 to 15.2 in 1989-90.

CAPITAL EMPLOYED

The Capital employed in the Refining and Marketing category decreased by 19.9% from Rs.6079.09 crores in 1988-89 to Rs. 4869.71 crores in 1989-90. This was due to decrease in working capital.

(Rs./Crores)

(3) SALES TURNOVER.

The sales turnover of the Companies under this category has increased by 11.4% from Rs. 28952.28 Crores in 1988-89 to Rs. 32258.10 Crores in 1989-90. The details of sales turnover in respect of major companies under this category are as under :

(Rs./Crores)

		1988-89	1989-90
1.	IOC	15150.74	17476.60
2.	BPCL	4348.68	4881.69
3.	HPCL	5866.78	6048.18
4.	CRL	1164.16	1337.07
5.	MRL	1330.28	1322.98
6.	IBP	923.02	995.53

(4) PROFITABILITY.

The %age of adjusted gross profit to sales turnover was 4.2% during 1989-90 as against 4.9% in 1988-89.

The adjusted gross profits and Net Profits were Rs. 1343.65 Crores and Rs. 1131.58 Crores in 1989-90 against Rs. 1412.56 crores & 907.77 crores respectively in 1988-89. The return on capital Employed which was 23.2% increased to 27%. The ratio of net profit to paid-up capital and Net worth were 258.6% and 24.3% in 1989-90 against 233.8% and 25.3% respectively in 1988-89.

(5) DIVIDEND.

During 1989-90, the companies under Refining and marketing paid out Rs. 88.54 crores as dividend as against Rs.64.19 crores in 1988-89. The amount paid in 1987-88 was Rs.51.79 crores. IOC paid out the highest amount of dividend amounting to Rs.24.65 crores followed by MRL amounting to Rs. 23.96 Crores.

(6) CORPORATE TAX.

The taxes paid by this group of companies was Rs.310.95 crores in 1989-90 against Rs.239.49 crores in 1988-89.

(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)

	1987-88	1988-89	1989-90
1. Paid-up Capital	199.82	199.82	199.82
2. Loans	105.13	83.13	48.97
3. Net Worth	258.72	275.63	297.12
4. Capital Employed	214.00	364.00	332.97
4.1. Net Fixed Assets	151.41	264.57	247.34
4.2. Working Capital	62.59	99.43	85.63
5. Sales turnover	342.51	338.56	402.84
6. Adjusted gross Profit	35.11	38.48	43.99
7. Adjusted net profit	22.11	22.02	28.92
8. Dividend paid	NIL	NIL	7.99
9. Corporate Tax	4.34	4.30	6.00

As analysis of the salient features is as under :

(1) CAPITAL INVESTMENT:

The capital investment decreased by 12.1% from Rs.282.95 crores in 1988-89 to Rs.248.79 crores in 1989-90. The decrease is due to reduction in loans from Rs. 83.13 crores in 1988-89 to Rs. 48.97 crores. With the decrease in loans, the loans/paid up capital ratio decreased from o.42 in 1988-89 to 0.25 in 1989-90.

(2) CAPITAL EMPLOYED:

The capital employed decreased by 8.5% from Rs.364.00 crores in 1988-89 to Rs.332.97 crores in 1989-90. The decrease in Capital employed is due to decrease in the net fixed assets and working capital in 1989-90 of the undertaking as compared with those in 1988-89.

(3) SALES TURNOVER:

The Sales Turnover decreased by 20.7% from Rs.338.56 Crores in 1988-89 to Rs.408.60 Crores in 1989-90.

(4) PROFITABILITY:

The % age of gross profits to sales turnover stood at 10.9% in 1989-90 as against 11.3% in 1988-89. The return on capital employed increased from 10.5% to 13.2% in the same period. The ratio of Net profit to paid-up Capital and net worth increased from 11.0% and 8% in 1988-89 to 14.5% and 9.8% respectively in 1989-90.

CORPORATE TAX:

The Company paid Rs.6.00 crores to the national exchequer as corporate tax in 1989-90 as against Rs. 4.30 crores paid in 1988-89.

(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)

	1987-88	1988-89	1989-90
1. Paid-up Capital	6.79	6.79	11.66
2. Loans	46.27	57.28	104.29
3. Net Worth	64.08	65.30	91.58
4. Capital Employed	110.28	139.12	163.15
4.1 Net Fixed Assets	36.83	58.52	60.62
4.2 Working Capital	73.45	80.60	102.53
5. Sales turnover	221.29	275.15	292.05
6. Adjusted gross Profit	26.27	23.75	12.42
7. Net Profit	8.37	2.36	3.79
8. Dividend	1.04	1.13	1.26
9. Corporate Tax	8.48	9.82	13.93

An analysis of the salient features are as under :

(1) CAPITAL INVESTMENT

The Capital Investment under this category increased by 81.1% from Rs.64.07 Crores in 1988-89 to Rs.115.95 Crores in 1989-90. The increase in the capital Investment was due to increase in the paid up capital and loans of the undernoted companies.

(Rs. in Crores)

Sl. No.	Name of the Company	(A) PAID UP CAPITAL 1988-98	1989-90	% age increase
1	Balmer Lawrie & Co. Ltd.	4.02	8.69	116.2
	Bieco Lawrie & Co. Ltd.	1.77	1.97	11.3
		(B) LOANS		
1.	Balmer Lawrie Co.Ltd.	10.92	52.21	378.1
2.	Biecco Lawrie Ltd.	41.36	47.82	15.6
	Total	52.28	100.03	

With the increase in loans the loans paid up capital ratio increased from 8.4 in 1988-89 to 8.9 in 1989-90.

(2) CAPITAL EMPLOYED

The capital employed by the engineering units has increased by 17.3% from Rs. 139.12 Crores in 1988-89 to Rs.163.15 Crores in 1989-90. The corresponding increase in the preceding year was 26.2%. The net fixed assets and working capital of the companies under this category are as under :-

(A) NET FIXED ASSETS

	1988-89	1989-90	(Rs./Crores) % + Increase - decrease
1. Engineers India Ltd.	41.35	39.65	(-) 4.1
2. Balmer Lawrie Ltd.	16.40	20.21	23.2
3. Biecco Lawrie Ltd.	0.77	0.76	(-) 1.3
TOTAL:	58.52	60.62	3.6

(B) WORKING CAPITAL

1. Engineers India Ltd.	40.85	44.80	9.7
2. Balmer Lawrie Ltd.	38.10	54.76	43.7
3. Biecco Lawrie Ltd.	1.65	2.97	1.8
TOTAL:	80.60	102.53	27.2

(3) SALES TURNOVER

The Sales turnover of the undertakings in this category increased by 6.1% from Rs.275.15 crores in 1988-89 to Rs.292.05 crores in 1989-90. The Corresponding increase in the preceding year was 24.3%. The ratio of gross profit to sales turnover declined from 8.6% in 1988-89 to 4.3% in 1989-90.

(4) PROFITABILITY

The adjusted gross profits have come down from Rs.23.75 Crores in 1988-89 to Rs. 12.42 Crores in 1989-90. The ratio of net profit to paid up capital came down from 38.1% in 1988-89 to 32.5% in 1989-90 . However the ratio of net Profit to Net worth marginally increased from 4.0% to 4.1% during the same priod.

(5) DIVIDEND

The Companies under this category paid a dividend of Rs. 1.26 crores in 1989-90 against Rs. 1.13 Crores paid during previous year.

(6) CORPORATE TAX

The contribution made by the companies to National Exchequer by way of taxes was Rs.13.93 crores in 1989-90 as against Rs.9.82 crores in 1988-89.

QUICK REVIEW OF FINANCIAL STRUCTURE 1990-91

In 1990-91, 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.27736.79 crores and had a paid-up capital of Rs.1899.50 crores as per enterprisewise details in Annexure-I. During 1990-91 these enterprises achieved an annual Sales turnover of Rs.46301.41 crores and earned a gross profit of Rs.3758.97 crores the corresponding figures for the year 1989-90 being Rs.42325.05 crores and Rs.4329.97 crores. Thus while the sales turnover increased by 9.4% the gross profit went down by 13.2%. The net profit after interest and taxes amounted to Rs.2309.63 crores during 1990-91 as against Rs.2903.09 crores in 1989-90. The ratio of net profit to paid-up capital and net worth worked out to 121.6% & 12.3% in 1990-91 as against 153.6% and 17.5% respectively in 1989-90.

The over-all financial position/results for the year 1990-91 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	1246.17	437.51	199.82	16.00	1899.50
2. Loans	7844.31	8608.03	35.79	88.22	16576.35
3. Net Worth	12730.89	5661.71	336.02	98.55	18827.17
4. Capital Employed	14076.61	13141.19	352.29	166.70	27736.79
5. Sales turnover	9612.19	35938.83	414.62	335.77	46301.41
6. Gross profit before Interest & Tax	1377.23	2296.82	53.16	31.76	3758.97
7. Net profit after Interest & Tax	1142.77	1105.85	48.50	12.51	2309.63
8. Corporate Tax	212.41	425.81	--	8.13	646.35
9. Dividend	86.48	89.77	9.99	3.12	189,36
% age of					
1. Net profit to paid-up Capital	91.7	252.8	24.3	78.2	121.6
2. Net profit to net worth	9.0	19.5	14.4	12.3	19.1
3. Gross Profit to Capital Employed	9.8	17.5	15.1	19.1	13.6

It would be seen from Annexure-I that with the exception of one company viz. Biecco Lawrie Ltd., all the companies have made profits. IOC has earned the highest gross profit of Rs.1557.10 crores followed by ONGG with a gross profit of Rs. 1153.41 crores. However, ONGC earned the highest net profit of Rs. 1066.64 crores followed by IOC with Rs. 722.76 Crores and BPCL with Rs. 129.95 Crores.

FINANCIAL STRUCTURE OF THE PUBLIC/JOINT SECTOR UNDERTAKINGS UNDER THE PURVIEW OF MINISTRY OF PETROLEUM & NATURAL GAS DURING THE YEAR 1990-91. PROVISIONAL

Annexure-I Rs./Lakhs.

Name of the Undertaking	Paid-up Capital	Loans	Net Worth	Capital Employed	Sales/ Operating Income	GP Before Before Int.& Tax	NP After Int. & Tax	Corpo- rate Tax	Dividend	% age of Percentage NP to Paid up Capital	NP to Net Worth	GP to CE
1	2	3	4	5	6	7	8	9	10	11	12	13
A.Exploration & Production	124617	784431	1273089	1407661	961219	137723	114277	21241	8648	91.7	9.0	9.8
1.ONGC	34285	672152	1131314	1212665	818917	115341	106664	16000	8228	311.1	9.4	9.5
2.ONGC's Videsh Ltd.	3000	2375	6918	1125		582	183	266		6.1	2.6	51.7
3.OIL	2800	25811	67859	45583	63201	12395	5157	4975	420	184.2	7.6	27.2
4.GAIL	84532	84093	66998	148288	79101	9405	2273			2.7	3.4	6.3
B.Refining&Marketing	43751	860803	566171	1314119	3593883	229682	110585	42581	8977	252.8	19.5	17.5
5.IOC	12327	718827	357187	1011542	1948289	155710	72276	20194	2465	586.3	20.2	15.4
6.BPCL	5000	45271	66401	94341	528306	25277	12995	8560	1000	259.9	19.6	26.8
7.HPCL	6384	54867	78399	123278	682822	24200	12300	6000	1277	192.7	15.7	19.6
8.CRL	6891	8782	25030	35434	157394	10140	6063	2985	1575	88.0	24.2	28.6
9.MRL	11413	22250	26143	33851	164799	10785	4970	4040	2283	43.5	19.0	31.9
10.IBO CO.LTD	736	6474	7188	7347	90383	1386	772	160	162	104.9	10.7	18.9
11.LIL	960	2791	5019	6344	20747	1684	856	544	211	89.2	17.1	26.5
12.IOBL	40	1541	804	1982	1143	500	353	98	4	882.5	43.9	25.2
C.Petrochemicals	19982	3579	33602	35229	41462	5316	4850		999	24.3	14.4	15.1
13.BRPL	19982	3579	33602	35229	41462	5316	4850		999	24.3	14.4	15.1
D.Engineering ser.	1600	8822	9855	16670	33577	3176	1251	813	312	78.2	12.7	19.1
14.EIL	100	350	8800	7153	6700	1478	800	650	25	800.0	9.1	20.7
15.BalmerLawrie	1303	3450	5904	9198	25894	1878	687	163	287	52.7	11.6	20.4
16.BieccoLawrie	197	5022	-4849	319	983	-180	-236			-119.8	4.9	-56.4.
GRANDTOTAL(A+B+C+D)	189950	1657635	1882717	2773679	4630141	375897	230963	64635	18936	121.6	12.3	13.6

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

CONSOLIDATED FINANCIAL STRUCTURE 1989-90 TABLE NO. 1
ALL CATEGORIES

ITEM	EXPLORATION & PRODUCTION.	REFINING & MARKETING	PETRO-CHEMICALS.	ENGINEERING & OTHER SERVICING UNITS.	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)
1. Authorised Capital	108000	52540	20000	1950	184490
2. i) Paid-up Capital	124117	43751	19982	1166	189016
ii) Preference Capital		50			50
iii) Reserve & Surpluses	1085012	422605	9794	12565	1529976
3. i) Total loans	685707	664461	4897	10429	1365494
ii) Of which Foreign	514991	518073	305		1033369
4. Cash credits/ advances from banks/others	6527	61927	401	2210	71065
5. Net worth	1150307	465886	29712	9158	1655063
6. i) Gross Block	1577325	599550	40121	9131	2226127
ii) Less Depreciation	792509	337448	15387	3069	1148413
iii) Net fixed assets	784816	262102	24734	6062	1077714
iv) Working Capital	275059	224869	8563	10253	518744
v) Capital Empl(iii+iv)	1059875	486971	33297	16315	1596458
7. i) Sales	937206	3225810	40284	29205	4232505
ii) Other income	8592	43349	104	1446	53491
TOTAL	945798	3269159	40388	30651	4285996
8. i) Total Emoluments (incl. perks)	41619	37573	1102	5483	85777
ii) of which bonus	1866	3060	16	132	5074
iii) Average Emoluments per person p.a.	0.73	0.63	0.61	0.72	0.68
9. Inventories	139031	318544	10632	3907	472114
10. Gross Profit					
a) Gross Profit before Interest & Tax (Actual)	233605	192323	4406	2663	432997
b) Adjusted Gross Profit	259528	134365	4399	1242	399534
11. Net Profit					
a) Net Profit after tax & Interest (Actual)	173873	113158	2899	379	290309
b) NP to Net Worth	199796	55200	2892	-1041	256847
12. Dividends declared	5906	8854	799	126	15685
13. Corporate Tax	43360	31095	600	1393	76448
% age of					
a) NP to Paid-up Capital	140.1	258.6	14.5	32.5	153.6
Adjusted NP to paid-upCap.	161.0	126.2	14.5	-89.3	135.9
b) NP to Net Worth	15.1	24.3	9.8	4.1	17.5
Adjusted GP to cap. emply.	17.4	11.8	9.7	-11.4	15.5
c) GP to Capital Employed	22.0	39.5	13.2	16.3	27.1
Adjusted Gp to cap. emply.	24.5	27.6	13.2	7.6	25.0
d) Sales to Cap. Emply.	88.4	662.4	121.0	179.0	265.1
e) GP to Sales	24.9	6.0	10.9	9.1	10.2
Adjusted GP to Sales	27.7	4.2	10.9	4.3	9.4
f) Paid-up Cap/Loan Ratio	0.18	0.07	4.08	0.11	0.14

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 Profit & Net Profits are as defined in the glossary of terms.

TABLE NO.2

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.3

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.4

CONSOLIDATED FINANCIAL STRUCTURE OF EXPLORATION & PRODUCTION

(Rs./Lakhs)

ITEM	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	108000	108000	108000
2. i) Paid-up Capital	123617	124117	124117
ii) Preference Capital	NIL	NIL	NIL
iii) Reserve & Surpluses	754585	935091	1085012
3. i) Total Loans	398817	549326	685707
ii) Of which Foreign	265288	395379	514991
4. Cash Credits/Advances from Banks/Others	800	NIL	6527
5. Net Worth	864207	1023096	1150307
6. i) Gross Block	1187181	1423544	1577325
ii) Less Depreciation	522759	648447	792509
iii) Net Fixed Assets	664422	775097	784816
iv) Working Capital	191650	232061	275059
v) Capital Empl.(iii+iv)	856072	1007158	1059875
7. i) Sales	664450	768722	937206
ii) Other Income	2484	15215	8592
Total	666934	783937	945798
8. i) Total Emoluments (incl. perks)	28151	30306	41619
ii) Of which Bonus	1943	2049	1866
iii) Average Emoluments per person p.a.	0.52	0.56	0.73
9. Inventories	122286	126430	139031
10. Gross Profit			
a) Gross Profit before Interest & Tax (Actual)	233377	226926	233605
b) Adjusted Gross Profit	244681	251318	259528
11. Net Profit			
a) Net profit after Tax & Interest (Actual)	150317	163867	173873
b) Adjusted Net Profit	161620	160170	199796
12. Dividends Declared	4448	5563	5906
13. Corporate Tax.	56399	51049	43360
% age of:			
a) N.P./Adjusted NP to paidup Capital	121.6/130.7	132.0/129.8	140.1/161.0
b) N.P./Adjusted N.P.to Net Worth	17.4/18.7	16.0/15.7	15.1/17.4
c) GP/Adjusted GP to Capital Emp.	27.2/28.6	23.5/24.9	22.0/24.5
d) Sales to Capital Emp.	77.6	76.3	88.4
e) G.P/Adjusted GP to Sales	35.1/36.8	29.5	24.9/27.7
f) Paid-up Capital/Loan Ratio.	0.31	0.23	0.18

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	1987-88	1988-89	1989-90
(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	707782	863280	1020955
3. i) Total Loans	346068	465709	577280
ii) Of which Foreign	251297	372811	481354
4. Cash Credits/Advances from Banks/Others	800	NIL	6527
5. Net Worth	735406	890617	1016639
6. i) Gross Block	1027270	1241400	1344351
ii) Less Depreciation	469283	577152	701765
iii) Net Fixed Assets	557987	664248	642586
iv) Working Capital	167212	204755	251258
v) Capital Empl.(iii+iv)	725199	869003	893844
7. i) Sales	609684	684316	807809
ii) Other Income	1047	12922	5464
Total	610731	697238	813273
8. i) Total Emoluments (incl. perks)	22772	26341	36229
ii) Of which Bonus	1602	1665	1865
iii) Average Emoluments per person p.a.	0.52	0.58	0.77
9. Inventories	110196	115764	121666
10. a) Gross Profit before Interest & Tax	228918	217144	211788
b) Adjusted Gross Profit	240217	241531	241986
11. a) Net Profit after Interest & Tax	150753	160158	162384
b) Adjusted Net Profit After Interest & Tax	162051	156456	192582
12. Dividends Declared	4028	5143	5486
13. Corporate Tax.	53473	49300	39700
% age of:			
a) N.P./Adjusted NP to paid-up Capital	439.7/472.7	467.1/456.3	473.6/561.7
b) N.P./Adjusted N.P.to Net Worth	20.4/22.0	18.0/17.6	16.0/18.9
c) GP/Adjusted GP to Capital Emp.	31.5/39.4	28.2/27.8	23.7/27.1
d) Sales to Capital Emp.	84.07	78.7	90.4
e) G.P/Adjusted GP to Sales	37.5/39.4	35.8/35.3	26.2/30.0
f) Paid-up Capital/Loan Ratio.	0.14	0.67	0.06

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	3000	3000	3000
2. i) Paid-up Capital	2500	2500	2500
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	2995	3337	3735
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	5495	5718	5274
6. i) Gross Block	4	6	17
ii) Less Depreciation	2	2	3
iii) Net Fixed Assets	2	4	14
iv) Working Capital	5495	2771	2291
v) Capital Empl.(iii+iv)	5497	2775	2305
7. i) Sales	--	--	--
ii) Other Income i.e.int.earned	499	532	538
Total	499	532	538
8. i) Total Emoluments (incl. perks)	8	15	24
ii) Of which Bonus	-NIL-	2	1
iii) Average Emoluments per person p.a.	0.75	0.72	0.89
9. Inventories	-NIL-	-NIL-	-NIL-
10. Gross Profit			
a) Gross Profit before Interest & Tax	481	492	447
b) Adjusted Gross Profit			447
11. Net Profit			
a) Net Profit after Tax & Interest	228	342	297
b) Adjusted net Profit	--	--	297
12. Dividends Declared	-NIL-	-NIL-	-NIL-
13. Corporate Tax.	253	150	150
% age of:			
a) N.P./Adjusted NP to paidup Capital	9.1	13.7	11.9
b) N.P./Adjusted N.P.to Net Worth	4.1	6.0	5.6
c) GP/Adjusted GP toCapital Emp.	8.8	17.7	19.4
d) Sales to Capital Emp.	-NIL-	-NIL-	0.0
e) G.P/Adjusted GP to Sales	-NIL-	-NIL-	
f) Paid-up Capital/Loan Ratio.	-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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	2800	2800	2800
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	43808	52044	60322
3. i) Total Loans	6413	8263	22047
ii) Of which Foreign	4397	4857	16251
4. Cash Credits/Advances from Banks/Others	--	--	--
5. Net Worth	46608	54844	53976
6. i) Gross Block	61046	69209	75467
ii) Less Depreciation	46202	51939	57632
iii) Net Fixed Assets	14844	17270	17835
iv) Working Capital	19161	24588	26476
v) Capital Empl.(iii+iv)	34005	41858	44311
7. i) Sales	50740	51667	64343
ii) Other Income	938	1755	2268
Total	51678	53422	66611
8. i) Total Emoluments (incl. perks)	3351	3759	4912
ii) Of which Bonus	341	382	--
iii) Average Emoluments per person p.a.	0.38	0.43	0.55
9. Inventories	10781	9946	11751
10. Gross Profit			
a) Gross Profit before Tax & Intt.(Actual)	9824	10701	14105
b) Adjusted Gross Profit	9829	10706	10268
11. Net Profit			
a) Net Profit after Tax & Intt.(actual)	6638	8656	8698
b) Adjusted Net Profit	6643	8661	4861
12. Dividends Declared	420	420	420
13. Corporate Tax.	2673	1599	3510
% age of:			
a) N.P./Adjusted NP to Paid-up Capital	237.0/ 237.2	309.1	310.6/173.6
b) N.P./Adjusted N.P.to Net Worth	14.2	15.8	16.1/9.0
c) GP/Adjusted GP to Capital Emp.	28.8	25.6	31.8/23.2
d) Sales to Capital Emp.	149.2	123.4	145.2
e) G.P/Adjusted GP to Sales	19.4	20.7	21.9/16.0
f) Paid-up Capital/Loan Ratio.	0.44	0.33	0.13

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	100000	100000	100000
2. i) Paid-up Capital	84032	84532	84532
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	--	16430	--
3. i) Total Loans	46336	75354	86380
ii) Of which Foreign	9594	17711	17386
4. Cash Credits/Advances from Banks/Others	--	--	--
5. Net Worth	76698	71917	74418
6. i) Gross Block	98861	112929	157490
ii) Less Depreciation	7272	19354	33109
iii) Net Fixed Assets	91589	93575	124381
iv) Working Capital	-218	- 53	-4966
v) Capital Empl.(iii+iv)	91371	93522	119415
7. i) Sales	4026	32739	65054
ii) Other Income	--	6	322
Total	4026	32745	65376
8. i) Total Emoluments (incl. perks)	20	121	454
ii) Of which Bonus	--	--	--
iii) Average Emolurents per person p.a.	0.43	0.49	0.48
9. Inventories	1309	720	5614
10. Gross Profit			
a) Gross Prcfit after Interest & Tax (actual)	-5846	-1411	7265
b) Adjusted Gross Profit	--	--	6827
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	-7302	-5289	2494
b) Adjusted Net Profit	--	--	2056
12. Dividends Declared	--	--	--
13. Corporate Tax.	--	--	--
% age of:-			
a) N.P./Adjusted NP to paidup Capital	Neg.	Neg.	3.0/2.4
b) N.P./Adjusted N.P.to Net Worth	Neg.	Neg.	3.4/2.8
c) GP/Adjusted Capital Emp.	Neg.	Neg.	6.1/5.7
d) Sales to Capital Emp.	4.4	35.0	54.5
e) G.P./Adjusted GP to Sales	Neg.	Neg.	11.2/10.5
f) Paid-up Capital/Loan Ratio.	1.81	1.12	0.98

Source: 1. Annual Report of the Company.
2. Gross & net profit are as given in the published Accounts.

TABLE NO.9

CONSOLIDATED FINANCIAL STRUCTURE

REFINING AND MARKETING

(Rs./Lakhs)

ITEM	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	46020	52540	54540
2. i) Paid-up Capital	33225	40647	43751
ii) Preference Capital	50	50	50
iii) Reserve & Surpluses	235699	319583	422605
3. i) Total Loans	236220	315745	664461
ii) Of which Foreign	96409	193341	518073
4. Cash Credits/Advances from Banks/Others	28315	27946	61927
5. Net Worth	267950	359259	465886
6. i) Gross Block	445386	517696	599550
ii) Less Depreciation	249393	290306	337448
iii) Net Fixed Assets	195993	227390	262102
iv) Working Capital	243428	380519	224869
v) Capital Empl.(iii+iv)	439421	607909	486971
7. i) Sales	2699962	2895228	3225810
ii) Other Income	19176	29028	43349
Total	2719138	2924256	3269159
8. i) Total Emoluments (incl. perks)	26255	31699	37573
ii) Of which Bonus	2577	2744	3060
iii) Average Emoluments per person p.a.	0.47	0.53	0.63
9. Inventories	302998	318108	318544
10. Gross Profit			
a) Gross Profit before Interest & Tax (actual)	110129	140982	192323
b) Adjusted Gross Profit	110219	141256	134365
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	64619	90777	113158
b) Adjusted Net Profit	64699	91051	55200
12. Dividends Declared	5179	6419	8854
13. Corporate Tax.	22033	23949	31095
% age of:			
a) NP/Adjusted NP to paidup Capital	194.2	223.0/223.7	258.6/126.2
b) N.P./Adjusted N.P.to Not Worth	24.1	25.3	24.3/11.8
c) GP/Adjusted Capital Emp.	25.0	23.2	39.5/27.6
d) Sales to Capital Emp.	614.4	476.3	662.4
e) G.P./Adjusted GP to Sales	4.0	4.9	6.0/4.2
f) Paid-up Capital/Loan Ratio.	0.16	0.12	0.07

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	15000	15000	15000
2. i) Paid-up Capital	12327	12327	12327
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	161092	210060	275049
3. i) Total Loans	99371	196917	544114
ii) Of which Foreign	86503	189990	514227
4. Cash Credits/Advances from Banks/Others	14784	11771	28951
5. Net Worth	173419	222387	287376
6. i) Gross Block	218796	248585	281936
ii) Less Depreciation	143120	163324	185238
iii) Net Fixed Assets	75676	85261	96698
iv) Working Capital	179149	315003	159925
v) Capital Empl.(iii+iv)	254825	400264	256623
7. i) Sales	1427108	1515074	1747660
ii) Other Income	15592	23550	36904
Total	1442701	1538624	1784564
8. i) Total Emoluments (incl. perks)	15405	18591	21417
ii) Of which Bonus	1698	1763	1976
iii) Average Emoluments per person p.a.	0.47	0.56	0.64
9. Inventories	185913	191465	176746
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	66012	81947	121205
b) Adjusted Gross Profit	65945	82124	69375
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	40976	51433	67454
b) Adjusted Net Profit	40899	51610	15624
12. Dividends Declared	2219	2465	2465
13. Corporate Tax.	16200	16208	16528
% age of:-			
a) NP/Adj.NP to paidup Capital	332.4/331.8	417.2/418.6	547.2/126.7
b) N.P./Adjusted N.P.to Net Worth	23.6	23.1	23.5/5.4
c) GP/Adjusted Capital Emp.	25.8	20.4	47.2/27.0
d) Sales to Capital Emp.	560.3	378.5	681.0
e) G.P./Adjusted GP to Sales	4.6	5.4	6.9/4.0
f) Paid-up Capital/Loan Ratio.	0.12	0.06	0.02

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	5000	5000	5000
2. i) Paid-up Capital	2785	2785	5000
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	30703	40578	49621
3. i) Total Loans	43824	47770	32149
ii) Of which Foreign	6407	--	756
4. Cash Credits/Advances from Banks/Others	6288	7714	8573
5. Net Worth	33488	43364	54621
i) Gross Block	73420	95539	111873
ii) Less Depreciation	35574	43916	53726
iii) Net Fixed Assets	37846	51623	58147
iv) Working Capital	17102	22807	7618
v) Capital Empl.(iii+iv)	54948	74430	65765
7. i) Sales	405002	434868	488169
ii) Other Income	1947	2134	2386
Total	406949	437002	490555
8. i) Total Emoluments (incl. perks)	4720	6140	6274
ii) Of which Bonus	511	525	576
iii) Average Emoluments per person p.a.	0.46	0.58	0.60
9. Inventories	25682	30423	35977
10. Gross Profit			
a) Gross Profit before Interest & Tax (actual)	12679	16253	19804
b) Adjusted Gross Profit	12698	16361	17929
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	7604	10909	12257
b) Adjusted Net Profit	7623	10918	10382
12. Dividends Declared	557	557	1000
13. Corporate Tax.	1700	2100	4400
% age of:-			
a) N.P./Adj. NP to paidup Capital	273.0/273.7	391.7/392.0	245.1/207.6
b) N.P./Adjusted N.P.to Net Worth	22.7	25.1	22.4/19.0
c) GP/Adjusted Capital Emp.	23.0	22.0	30.1/27.3
d) Sales to Capital Emp.	737.0	584.3	742.3
e) G.P./Adjusted GP to Sales	3.1	3.8	4.1/3.7
f) Paid-up Capital/Loan Ratio.	0.06	0.05	0.16

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	10000	10000	10000
2. i) Paid-up Capital	6384	6384	6384
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	26710	43206	61955
3. i) Total Loans	54672	40344	48930
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	6812	5294	18160
5. Net Worth	32306	48770	68339
6. i) Gross Block	93035	107583	127319
ii) Less Depreciation	45124	53296	64140
iii) Net Fixed Assets	47911	54287	63179
iv) Working Capital	24949	18350	26472
v) Capital Empl.(iii+iv)	72860	72637	89651
7. i) Sales	545070	586678	604818
ii) Other Income	932	1487	1957
Total	546002	588165	606775
8. i) Total Emoluments (incl. perks)	3737	4038	5952
ii) Of which Bonus	227	251	255
iii) Average Emoluments per person p.a.	0.43	0.44	0.62
9. Inventories	45647	55799	59091
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	18653	25854	29579
b) Adjusted Gross Profit	18708	25904	27917
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	10157	17390	20026
b) Adjusted Net Profit	10212	17440	18364
12. Dividends Declared	638	894	1277
13. Corporate Tax.	2241	3267	4714
% age of:-			
a) N.P./Adj. NP to paidup Capital	159.1/160.0	272.4/273.2	313.7/287.7
b) N.P./Adjusted N.P.to Net Worth	31.4/31.6	35.6/35.8	29.3/26.9
c) GP/Adjusted GP to Capital Emp.	25.6	35.6	33.0/31.1
d) Sales to Capital Emp.	532.9	807.7	674.6
e) G.P./Adjusted GP to Sales	4.8	4.4	4.9/4.6
f) Paid-up Capital/Loan Ratio.	0.12	0.15	0.13

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	1500	7500	7500
2. i) Paid-up Capital	1000	6848	6891
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	4239	8215	13651
3. i) Total Loans	19899	12588	14256
ii) Of which Foreign	3499	3351	3090
4. Cash Credits/Advances from Banks/Others	103	749	2259
5. Net Worth	5240	15062	20542
6. i) Gross Block	22774	23319	31517
ii) Less Depreciation	9161	10438	11698
iii) Net Fixed Assets	13613	12881	19819
iv) Working Capital	6588	6441	10123
v) Capital Empl.(iii+iv)	20201	19322	29942
7. i) Sales	103223	116416	133707
ii) Other Income	36	318	69
Total	103259	116734	133776
8. i) Total Emoluments (incl. perks)	442	579	639
ii) Of which Bonus	11	27	31
iii) Average Emoluments per person p.a.	0.42	0.54	0.56
9. Inventories	12579	9060	9611
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	5191	6202	8968
b) Adjusted Gross Profit	5200	6207	8475
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	1954	4156	6876
b) Adjusted Net Profit	1963	4161	6383
12. Dividends Declared	84	180	1441
13. Corporate Tax.	525	680	1350
% age of:-			
a) NP/Adjusted NP to paidup Capital	195.4/196.3	60.7	99.8/92.6
b) N.P./Adjusted N.P.to Net Worth	37.3	27.6	33.5/31.1
c) GP/Adjusted GP to Capital Emp.	25.7	32.1	30.0/28.3
d) Sales to Capital Emp.	511.0	602.5	446.6
e) G.P./Adjusted GP to Sales	5.0	5.3	6.7/6.3
f) paid-up Capital/Loan Ratio.	0.05	0.54	0.48

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	13500	13500	13500
2. i) Paid-up Capital	9825	11399	11413
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	6834	9876	12503
3. i) Total Loans	17980	16915	18913
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	--	--	--
5. Net Worth	16422	21249	23396
6. i) Gross Block	30975	34887	37570
ii) Less Depreciation	13772	16287	19162
iii) Net Fixed Assets	17203	18600	18408
iv) Working Capital	12559	13814	15205
v) Capital Empl.(iii+iv)	29762	32414	33613
7. i) Sales	119880	133028	132298
ii) Other Income	269	913	1266
Total	120149	133941	133564
8. i) Total Emoluments (incl. perks)	461	518	1027
ii) Of which Bonus	33	53	102
iii) Average Emoluments per person p.a.	0.41	0.43	0.79
9. Inventories	29750	27583	31348
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	5164	7884	10251
b) Adjusted Gross Profit	5231	7900	8982
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	2456	5128	5023
b) Adjusted Net Profit	2523	5144	3754
12. Dividends Declared	1474	2085	2396
13. Corporate Tax.	552	976	3469
% age of:-			
a) N.P./Adjusted NP to paidup Capital	25.0/25.6	44.9/45.1	44.0/32.9
b) N.P./Adjusted N.P.to Net Worth	14.9/15.3	24.1	21.5/16.0
c) GP/Adjusted GP to Capital Emp.	17.3/17.5	24.3	30.5/26.7
d) Sales to Capital Emp.	402.7	410.4	393.6
e) G.P./Adjusted GP to Sales	4.3	5.9	7.7/6.8
f) Paid-up Capital/Loan Ratio.	0.54	0.67	0.6

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	500	500	2500
2. i) Paid-up Capital	384	384	736
ii) Preference Capital	50	50	50
iii) Reserve & Surpluses	3138	3936	5836
3. i) Total Loans	28	28	3350
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	317	1288	3272
5. Net Worth	3572	4195	6622
6. i) Gross Block	3193	4056	5343
ii) Less Depreciation	1221	1416	1645
iii) Net Fixed Assets	1972	2640	3698
iv) Working Capital	887	548	2156
v) Capital Empl.(iii+iv)	2859	3188	5854
7. i) Sales	85284	92302	99553
ii) Other Income	326	525	532
Total	85610	92827	100085
8. i) Total Emoluments (incl. perks)	861	1090	1233
ii) Of which Bonus	51	70	73
iii) Average Emoluments per person p.a.	0.44	0.54	0.56
9. Inventories	1001	1102	2258
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	1032	1273	850
b) Adjusted Gross Profit	1034	1288	236
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	732	889	601
b) Adjusted Net Profit	734	904	-13
12. Dividends Declared	83	90	113
13. Corporate Tax.	280	270	117
% age of:-			
a) NP/Adjusted NP to paidup Capital	168.6/169.1	204.8/208.3	81.7/-1.8
b) N.P./Adjusted N.P.to Net Worth	20.4	21.2/21.5	9.1/-0.2
c) GP/Adjusted GP to Capital Emp.	36.0	39.9/40.4	14.5/4.0
d) Sales to Capital Emp.	2983.0	2895.3	1700.6
e) G.P./Adjusted GP to Sales	1.2	1.4	0.9/0.2
f) Paid-up Capital/Loan Ratio.	15.5	15.5	0.22

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	480	1000	1000
2. i) Paid-up Capital	480	480	960
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	2627	3252	3414
3. i) Total Loans	609	507	1887
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	--	1130	712
5. Net Worth	3107	3732	4374
6. i) Gross Block	2495	2896	3110
ii) Less Depreciation	999	1177	1334
iii) Net Fixed Assets	1496	1719	1776
iv) Working Capital	1994	3229	3372
v) Capital Empl.(iii+iv)	3490	4948	5148
7. i) Sales	13719	16116	18684
ii) Other Income	58	86	170
Total	13777	16202	18854
8. i) Total Emoluments (incl. perks)	327	369	531
ii) Of which Bonus	13	15	12
iii) Average Emoluments per person p.a.	0.68	0.69	0.95
9. Inventories	2226	2653	3446
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	1277	1315	1452
b) Adjusted Gross Profit	1282	1315	1289
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	688	769	801
b) Adjusted Net Profit	692	769	638
12. Dividends Declared	120	144	158
13. Corporate Tax.	482	408	437
% age of:-			
a) NP/Adj. NP to paidup Capital	143.3/144.1	160.2	83.4/66.5
b) N.P./Adjusted N.P.to Net Worth	22.1/22.3	20.6	18.3/14.6
c) GP/Adjusted GP to Capital Emp.	36.6	26.6	28.2/25.0
d) Sales to Capital Emp.	393.0	325.7	362.9
e) G.P./Adjusted GP to Sales	9.3	8.2	7.8/6.9
f) Paid-up Capital to Loan Ratio	0.78	0.94	0.51

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	40	40	40
2. i) Paid-up Capital	40	40	40
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	356	460	576
3. i) Total Loans	157	676	862
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	11		--
5. Net Worth	396	500	616
6. i) Gross Block	698	831	882
ii) Less Depreciation	422	452	505
iii) Net Fixed Assets	276	379	377
iv) Working Capital	200	327	-2
v) Capital Empl.(iii+iv)	476	706	375
7. i) Sales	676	746	921
ii) Other Income	16	15	65
Total	692	761	986
8. i) Total Emoluments (incl. perks)	312	374	500
ii) Of which Bonus	34	40	35
iii) Average Emoluments per person p.a.	0.47	0.49	0.75
9. Inventories	20	23	67
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	121	155	214
b) Adjusted Gross Profit	121	157	162
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	52	103	120
b) Adjusted Net Profit	53	105	68
12. Dividends Declared	4	4	4
13. Corporate Tax.	53	40	80
% age of:-			
a) N.P./Adj. NP to paidup Capital	130.0	257.5/262.5	300.0/170.0
b) N.P./Adjusted N.P.to Net Worth.	13.1	20.6/21.0	19.5/11.0
c) GP/Adjusted GP to Capital Emp.	25.5	21.9/22.2	57.1/43.2
d) Sales to Capital Emp.	142.0	105.6	245.6
e) G.P./Adjusted GP to Sales	17.9	20.8/22.2	23.2/17.6
f) Paid-up Capital/Loan Ratio.	0.25	0.05	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)

ITEM	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	20000	20000	20000
2. i) Paid-up Capital	19982	19982	19982
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	6102	7694	9794
3. i) Total Loans	10513	8313	4897
ii) Of which Foreign	331	368	305
4. Cash Credits/Advances from Banks/Others	28	2343	401
5. Net Worth	25872	27563	29712
6. i) Gross Block	24367	38822	40121
ii) Less Depreciation	9226	12365	15387
iii) Net Fixed Assets	15141	26457	24734
iv) Working Capital	6259	9943	8563
v) Capital Empl.(iii+iv)	21400	36400	33297
7. i) Sales	34251	33856	40284
ii) Other Income	222	135	104
Total	34473	33991	40388
8. i) Total Emoluments (incl. perks)	650	815	1102
ii) Of which Bonus	46	21	16
iii) Average Emoluments per person p.a.	0.40	0.46	0.61
9. Inventories	7584	11499	10632
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	3516	3839	4406
b) Adjusted Gross Profit	3511	3848	4399
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	2216	2192	2899
b) Adjusted Net Profit	2211	2202	2892
12. Dividends Declared	--	599	799
13. Corporate Tax.	434	430	600
% age of:-			
a) NP/Adjusted NP to paidup Capital	11.0	11.0	14.5/14.5
b) N.P./Adjusted N.P.to Net Worth	8.6	8.0	9.8/9.7
c) GP/Adjusted GP to Capital Emp.	16.4	10.5	13.2/13.2
d) Sales to Capital Emp.	160.0	93.0	121
e) G.P./Adjusted GP to Sales	10.3	11.3	10.9/10.9
f) Paid-up Capital/Loan Ratio.	1.90	2.40	4.08

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	950	1250	1950
i) Paid-up Capital	679	679	1166
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	8999	9978	12565
3. i) Total Loans	4627	5728	10429
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	1841	2288	2210
5. Net Worth	6408	6530	9158
6. i) Gross Block	5881	8371	9131
ii) Less Depreciation	2198	2519	3069
iii) Net Fixed Assets	3683	5852	6062
iv) Working Capital	7345	8060	10253
v) Capital Empl.(iii+iv)	11028	13912	16315
7. i) Sales	22129	27515	29205
ii) Other Income	579	474	1446
Total	22708	27989	30651
8. i) Total Emoluments (incl. perks)	3450	4795	5483
ii) Of which Bonus	132	114	132
iii) Average Emoluments per person p.a.	0.40	0.54	0.72
9. Inventories	2276	3705	3907
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	2581	2353	2663
b) Adjusted Gross Profit	2627	2375	1242
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	837	236	379
b) Adjusted Net Profit	884	258	-1041
12. Dividends Declared	104	113	126
13. Corporate Tax.	848	982	1393
% age of:-			
a) NP/Adj. NP to paidup Capital	123.2/130.1	34.8/38.0	32.5/-89.3
b) N.P./Adjusted N.P.to Net Worth	13.0/13.7	3.6/4.0	4.1/-11.4
c) GP/Adjusted GP to Capital Emp.	23.4/23.8	16.9	16.3/7.6
d) Sales to Capital Emp.	200.6	197.8	179.0
e) G.P./Adjusted GP to Sales	11.6/11.8	8.6	9.1/4.3
f) Paid up Capital to Loan Ratio	0.15	0.11	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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	200	200	200
2. i) Paid-up Capital	100	100	100
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	7139	7623	7925
3. i) Total Loans	575	500	426
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	18	--	--
5. Net Worth	7239	7723	8025
6. i) Gross Block	3224	5101	5211
ii) Less Depreciation	859	966	1246
iii) Net Fixed Assets	2365	4135	3965
iv) Working Capital	4066	4085	4480
v) Capital Empl.(iii+iv)	6431	8220	8445
7. i) Sales	5596	6297	6216
ii) Other Income	444	470	754
Total	6040	6767	6970
8. i) Total Emoluments (incl. perks)	2230	3172	3275
ii) Of which Bonus	53	37	29
iii) Average Emoluments per person p.a.	0.61	0.88	0.95
9. Inventories	25	59	101
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	1558	1190	1632
b) Adjusted Gross Profit	1587	1208	895
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	1013	509	331
b) Adjusted Net Profit	1043	527	-406
12. Dividends Declared	20	25	25
13. Corporate Tax.	502	642	1260
% age of:-			
a) NP/Adj.NP to paidup Capital	1013.0/1043.0	509.0/527.0	331.0/-406.0
b) N.P./Adjusted N.P.to Net Worth	13.9/14.4	6.6/6.8	4.0/-5.1
c) GP/Adjusted GP to Capital Emp.	24.2/24.6	14.4/14.7	19.3/10.6
d) Sales to Capital Emp.	87.0	76.6	73.6
e) G.P./Adjusted GP to Sales	27.8	18.9/19.2	26.3/14.4
f) Paid-up Capital to Loan Ratio	0.17	0.20	0.23

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	500	800	1500
2. i) Paid-up Capital	402	402	869
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	1855	2350	4635
3. i) Total Loans	727	1092	5221
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	1778	2234	2140
5. Net Worth	2258	2752	5504
6. i) Gross Block	2366	2953	3596
ii) Less Depreciation	1108	1313	1575
iii) Net Fixed Assets	1258	1640	2021
iv) Working Capital	3072	3810	5476
v) Capital Empl.(iii+iv)	4330	5450	7497
7. i) Sales	15964	20496	22113
ii) Other Income	132	--	688
Total	16092	20496	22801
8. i) Total Emoluments (incl. perks)	904	1247	1767
ii) Of which Bonus	64	64	88
iii) Average Emoluments per person p.a.	0.34	0.44	0.58
9. Inventories	1990	3404	3533
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	1263	1416	1241
b) Adjusted Gross Profit	1280	1424	543
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	528	583	287
b) Adjusted Net Profit	545	591	-410
12. Dividends Declared	84	88	101
13. Corporate Tax.	346	340	125
% age of:-			
a) NP/Adj.NP to paidup Capital	131.3/135.5	145.0/147.0	33.0/-47.2
b) N.P./Adjusted N.P.to Net Worth	23.3/24.1	21.2/21.5	5.2/-7.4
c) GP/Adjusted GP to Capital Emp.	29.1/29.5	26.0	16.6/7.2
d) Sales to Capital Emp.	368.6	376.0	295.0
e) G.P./Adjusted GP to Sales	7.9	6.9	5.6/2.5
f) Paid-up Capital to Loan Ratio	0.55	0.36	0.17

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	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)
1. Authorised Capital	250	250	250
2. i) Paid-up Capital	177	177	197
ii) Preference Capital	--	--	--
iii) Reserve & Surpluses	5	5	5
3. i) Total Loans	3225	4136	4782
ii) Of which Foreign	--	--	--
4. Cash Credits/Advances from Banks/Others	45	54	70
5. Net Worth	(-)3089	(-)3945	(-)4371
6. i) Gross Block	291	317	324
ii) Less Depreciation	231	240	248
iii) Net Fixed Assets	60	77	76
iv) Working Capital	207	165	297
v) Capital Empl.(iii+iv)	267	242	373
7. i) Sales	569	722	876
ii) Other Income	3	4	4
Total	572	726	880
8. i) Total Emoluments (incl. perks)	316	376	441
ii) Of which Bonus	15	13	15
iii) Average Emoluments per person p.a.	0.25	0.29	0.41
9. Inventories	253	242	273
10. Gross Profit			
a) Gross Profit after Interest & Tax (actual)	(-)240	(-)253	(-)210
b) Adjusted Gross Profit	(-)240	(-)257	(-)196
11. Net Profit			
a) Net Profit after Tax & Interest (actual)	(-)704	(-)856	(-)239
b) Adjusted Net Profit	(-)704	(-)860	(-)225
12. Dividends Declared	--	--	--
13. Corporate Tax.	--	--	--
% age of:-			
a) NP/Adjusted NP to paidup Capital	Neg.	Neg.	-121.3/-114.2
b) N.P./Adjusted to N.P.Net Worth	Neg.	Neg.	5.5/5.1
c) GP/Adjusted GP to Capital Emp.	Neg.	Neg.	-56.3/-52.5
d) Sales to Capital Emp.	213.1	298.3	234.9
e) G.P./Adjusted GP to Sales	Neg.	Neg.	-24.0/-22.4
f) Paid-up Capital to Loan Ratio	0.05	0.04	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 1-4-89 1-4-90 and 1-4-91

(Rs./Crores)

Name of the Undertaking	As on 1-4-1989				As on 1-4-1990				As on 1-4-1991			
	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	1241.2	5463.6	6704.8	1954.1	1241.2	6857.1	8098.3	2375.9	1246.2	7844.3	9090.5	N.A.
1. ONGC	342.9	4653.2	4996.1	875.3	342.9	5772.8	6115.7	1277.0	342.9	6721.5	7064.4	N.A.
2. ONGC's Videsh Ltd.	25.0	--	25.0	--	25.0	--	25.0	--	30.0	23.8	53.8	N.A.
3. OIL	28.0	83.1	111.0	41.0	28.0	220.5	248.5	85.2	28.0	258.1	286.1	N.A.
4. GAIL	845.3	727.3	1572.6	1037.8	845.3	863.8	1709.1	1013.7	845.3	840.9	1686.3	N.A.
B. Refining and Marketing	407.0	2790.9	3197.9	590.6	437.5	6644.6	7082.1	598.8	437.5	8608.0	9045.5	N.A.
5. IOC	123.3	1974.5	2097.8	130.1	123.3	5441.1	5564.4	123.3	123.3	7188.3	7311.5	N.A.
6. BPCL	27.9	221.1	249.0	93.8	50.0	321.5	371.5	113.6	50.0	452.7	502.7	N.A.
7. HPCL	63.8	288.1	351.9	138.5	63.8	489.3	553.1	134.0	63.8	548.7	612.5	N.A.
8. CRL	68.5	125.9	194.4	79.2	68.9	142.6	211.5	76.6	68.9	87.8	156.7	N.A.
9. MRL	114.0	169.2	283.2	143.5	114.1	189.1	303.2	140.8	114.1	222.5	336.7	N.A.
10. IBP Co. Ltd.	4.3	0.3	4.6	2.7	7.4	33.5	40.9	4.7	7.4	64.7	72.1	N.A.
11. Lubrizol India Ltd.	4.8	5.0	9.8	2.8	9.6	18.9	28.5	5.8	9.6	27.9	37.5	N.A.
12. IOB	0.4	6.8	7.2	--	0.4	8.6	9.0	--	.4	15.4	15.8	N.A.
C. Petro-Chemicals	199.8	76.2	276.0	199.8	199.8	48.9	248.7	199.8	199.8	35.8	235.6	N.A.
13. BRPL	199.8	76.2	276.0	199.8	199.8	48.9	248.7	199.8	199.8	35.8	235.6	N.A.
D. Engineering Unit	6.8	45.8	52.6	24.9	11.7	104.3	116.0	25.1	16.0	88.2	104.2	N.A.
14. EIL	1.0	5.0	6.0	1.0	1.0	4.3	5.3	1.0	1.0	3.5	4.5	N.A.
15. Balmer Lawrie Ltd.	4.0	18.3	22.3	--	8.7	52.2	60.9	--	13.0	34.5	47.5	N.A.
16. Biecco Lawrie Ltd.	1.8	22.5	24.3	23.9	2.0	47.8	49.8	24.1	2.0	50.2	52.2	N.A.
TOTAL (A+B+C+D)	1854.8	8376.5	10231.3	2769.4 (27.1%)	1890.2	13654.9	15545.1	3199.6 (21.6%)	1899.5	16576.4	18475.9	N.A.

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 non 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 before providing for interest on loans, taxes, appropriation to reserves, charges pertaining to previous years, 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 bad debts 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

ABBREVIATIONS

(i) Companies/Organisations

AOC	: Assam Oil Company.
BPCL	: Bharat Petroleum Corporation Limited.
BRPL	: Bongaigaon Refinery & Petrochemicals Limited.
B/Shell/BSM	: Burmah Shell Oil Storage & Distributing Co.Ltd.
BSR	: Burmah Shell Refineries Limited.
Caltex/CIL	: Caltex (India) Limited.
CORIL	: Caltex Oil Refining (India) Limited.
CRL	: Cochin Refineries Limited.
EIL	: Engineers India Limited.
ESSO	: Esso Standard Eastern Inc.
ESRC	: Esso Standard Refining Company of India Limited.
GAIL	: Gas Authority of India Ltd.
HPCL	: Hindustan Petroleum Corporation Limited.
HIL	: Hydrocarbons India Limited.
IBP Co. Ltd.	: IBP Co. Limited.
INDROL	: INDROL Lubricants & Specialities Limited.
IIP	: Indian Institute of Petroleum.
IPE	: Institute of Petroleum Exploration.
IOBL	: Indian Oil Blending Limited.
IOC	: Indian Oil Corporation Limited.
LIL	: Lube India Limited.
Lubrizol	: Lubrizol India Limited.
MRL	: Madras Refineries Limited.
POCL	: Petrosil Oil Company Limited.
OIL	: Oil India Limited.
ONGC	: Oil & Natural Gas Commission.
OPEC	: Organisation of Petroleum Exporting Countries.
TWOC	: Tide Water Oil Company.
WIODC	: Western India Oil Distributing Company Limited.
OECD	: Organisation for Economic Co-operation & Development
NCW	: Non Communist World

(ii) Petroleum Products

ATF	: Aviation Turbine Fuel.
AVGAS	: Aviation Gasoline/Spirit.
CBFS	: Carbon Black Feed Stock.
HHS	: Hot Heavy Stock.
HSDO	: High Speed Diesel Oil.
JBO	: Jute Batching Oil.
LDO	: Light Diesel Oil.
LSHS	: Low Sulphur Heavy Stock.
LPG	: Liquified Petroleum Gas.
MS/Mogas	: Motor Spirit/Motor Gasoline.
FO	: Furnace Oil.
MTO	: Mineral Turpentine Oil.
Pet-coke	: Petroleum Coke.
SBP-Spirit	: Special Boiling Point Spirit.
SKO	: Superior Kerosene Oil.
TDO	: Tea Drier Oil.
NGL	: Natural Gas Liquid

LIGHT DISTILLATES: (including Gases): Gasolines, Naphtha, SBP Spirit, Solvent Oils, Hexane, Benzene, Toluene, L.P.G., Refinery Gas and W.D. Mixtures.

MIDDLE DISTILLATES: Kerosene, ATF/Jet-A1, Vaporising Oil, Aromex/Iomex, HSDO, LDO/MLO and JBO, Mineral Turpentine Oils, Chemisperse & LABFS.

(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 AND 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
			Kcals/Cu.metre
E.	Natural Gas-Production: (Average) India		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	17.344	17.554	18.087	17.504		

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.

ERRATA LIST

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