## Performance of Selected Industries

### Petroleum, Oil and Lubricants

7.21 In 1998-99, crude oil production was 32.72 million tonnes registering a decline of 3.4 per cent from 33.86 million tonnes in 1997-98. However, in the current year (April-November 1999), crude oil production was 21.63 million tonnes, marginally higher by 0.4 per cent from the production of 21.54 million tonnes attained during April-November 1998-99 (Table 7.9).

7.22 During April-November 1999, natural gas production was 18.82 Billion Cubic Metres (BCM). This was 3.1 per cent higher than the production of 18.25 BCM in April-November 1998. Natural gas production in 1998-99 was 27.43 BCM.

7.23 The recent measures taken to augment the supply of natural gas include: (i) a joint venture between GAIL (Gas Authority of India Limited) and British Gas in Mumbai and between GAIL and BPCL (Bharat Petroleum Corporation Ltd) in Delhi for supplying gas to households and CNG for use in vehicles (ii) commissioning of the Gas Flaring Reduction Project by ONGC (Oil & Natural Gas Corporation Ltd) in Western Offshore area and two new LPG plants in Assam and Maharashtra and (iii) expansion of the capacity of HBJ (Hazira-Bijapur-Jagdishpur) pipeline by GAIL.

7.24 During April-November 1999, the total refinery production was 48.20 million tonnes. This was an increase of 15.7 per cent, compared to 41.67 million tonnes during April-November 1998. Total refining capacity in the country increased to 103.34 MMTPA (Million Metric Tonnes per Annum) as on 1st October 1999 compared to 69.14 MMTPA on 1st April 1999. As per the current outlook, the refining capacity is expected to increase to around 123.34 MMTPA by the end of IXth Plan.

7.25 Total consumption of petroleum products (excluding import by private parties) during April-November 1999 was 59.1 million tonnes, 7.8 per cent higher than 54.8 million tonnes during the corresponding period of the previous year. The total consumption in 1998-99 was 89.4 million tonnes (including 5.8 million tonnes imported by private parties), 6 per cent more than the previous year's consumption of 84.3 million tonnes (including 4.5 million tonnes imported by private parties) (Table 7.10).

**TABLE 7.9**

**Trends in the Petroleum sector**

| Item | 96-97 | 97-98 | 98-99* | April-November* 1998 | April-November* 1999 | % Change over previous year 97-98 | % Change over previous year 98-99 | % Change over previous year 99-00** |
|---|---|---|---|---|---|---|---|---|
| | | | | (million tonnes) | | | (per cent) | |
| 1. Crude oil production | 32.90 | 33.86 | 32.72 | 21.54 | 21.63 | 2.9 | -3.4 | 0.4 |
| (i) On-shore | 11.41 | 11.52 | 11.47 | 7.71 | 7.52 | 1.0 | -0.4 | -2.5 |
| (a) ONGC | 8.50 | 8.39 | 8.10 | 5.46 | 5.25 | -1.3 | -3.5 | -3.8 |
| (b) OIL | 2.87 | 3.09 | 3.29 | 2.21 | 2.20 | 7.7 | 6.5 | -0.5 |
| (c) JVC | 0.04 | 0.04 | 0.07 | 0.04 | 0.07 | 0.0 | 75.0 | 75.0 |
| (ii) Off-shore | 21.49 | 22.34 | 21.25 | 13.83 | 14.11 | 4.0 | -4.9 | 2.0 |
| (a) ONGC | 20.18 | 19.87 | 18.29 | 12.23 | 11.50 | -1.5 | -8.0 | -6.0 |
| (c) JVC | 1.31 | 2.47 | 2.96 | 1.60 | 2.61 | 88.5 | 19.8 | 63.1 |
| 2. Refinery throughput | 62.87 | 65.17 | 68.54 | 44.34 | 53.22 | 3.7 | 5.2 | 20.0 |
| 3. Production of petroleum products $ | 59.01 | 61.31 | 64.54 | 41.67 | 48.20 | 3.9 | 5.3 | 15.7 |
| | | | | (billion cubic metres) | | | | |
| 4. Natural gas prodn. | 23.26 | 26.40 | 27.43 | 18.25 | 18.82 | 13.5 | 3.9 | 3.1 |

* Provisional **April-November $ Excludes LPG production from fractionator

**TABLE 7.10**

**Consumption of Petroleum products****

| Item | 1996-97 | 1997-98 | 1998-99* | April-November* 1998 | April-November* 1999 | % Change over previous year 1997-98 | % Change over previous year 1998-99 | % Change over previous year 1999-00@ |
|---|---|---|---|---|---|---|---|---|
| | (million tonnes) | | | | | (per cent) | | |
| 1. Light distillates of which | 14.4 | 15.7 | 17.5 | 11.4 | 12.9 | 9.0 | 11.5 | 13.2 |
| (a) Naptha | 4.0 | 4.7 | 6.2 | 4.0 | 5.0 | 17.5 | 31.9 | 25.0 |
| (b) LPG | 4.2 | 4.6 | 5.0 | 3.2 | 3.7 | 9.5 | 8.7 | 15.6 |
| (c) Petrol | 5.0 | 5.2 | 5.5 | 3.7 | 3.9 | 4.0 | 5.8 | 5.4 |
| 2. Middle distillates of which | 48.5 | 49.7 | 51.4 | 33.8 | 35.9 | 2.5 | 3.4 | 6.2 |
| (a) Kerosene | 9.6 | 9.9 | 10.6 | 7.0 | 7.1 | 3.1 | 7.1 | 1.4 |
| (b) Diesel oil | 35.0 | 36.1 | 36.9 | 24.2 | 26.1 | 3.1 | 2.2 | 7.9 |
| 3. Heavy ends of which | 14.3 | 14.4 | 14.7 | 9.6 | 10.2 | 0.7 | 2.1 | 6.3 |
| Fuel oil | 10.8 | 11.0 | 11.0 | 7.3 | 7.8 | 1.9 | 0.0 | 6.8 |
| **Total (1+2+3)** | 77.2 | 79.8 | 83.6 | 54.8 | 59.1 | 3.4 | 4.8 | 7.8 |
| 4. Import by private parties | 2.0 | 4.5 | 5.8 | NA | NA | 125.0 | 28.9 | NA |
| **Total** | **79.2** | **84.3** | **89.4** | **NA** | **NA** | **6.4** | **6.0** | **NA** |

*** Provisional    @ April-November    ** Excluding Refinery Boiler Fuel    NA: Not available**

7.26 There was a substantial increase of international prices of oil during 1999-2000. As a result, the Oil Pool Account Deficit increased significantly in 1999-2000, despite an increase in administered prices of diesel in October, 1999. The current profile of the oil pool deficit and its financing are given in Box 7.2.

7.27 Gross imports of crude oil and petroleum products during April-November 1999 was 41.1 million tonnes valued at Rs. 26,806 crore compared to 39.1 million tonnes valued at Rs. 16,890 crore in the corresponding period of 1998. Aggregate gross imports for 1998-99 was 58.6 million tonnes. Private and joint sector refineries have been allowed to import crude freely without import license for actual use in the refineries. The exports of petroleum products during April-November 1999 was 531 thousand tonnes valued at Rs. 372 crore, 5 per cent less than the exports made during the corresponding period of the previous year.

7.28 A number of in-house conservation methods have been adopted by the upstream undertakings like reduction of gas flaring by reinjection of gas to underground reservoirs, installation of waste heat recovery systems, utilisation of non-conventional energy sources, replacement of low efficiency equipment with more efficient ones such as heat exchangers, economisers and co-generation equipment, adoption of improved housekeeping practices, a phased programme to produce, upgrade and sell high-grade lubricants in place of low efficiency ones, development of multi-grade rail road engine oils with potential to conserve two-three per cent diesel for Indian Railways and reduction of transport loss by import tankers and coastal tankers over sea routes and at ports of unloading down to the lowest level.

7.29 Several steps have been taken to ensure abatement of vehicular pollution. Lead free petrol, already available in the metropolises, State capitals, Union Territories, and in major towns having population of 10 lakhs and above, would be available throughout the country by March 2000. Diesel, with low sulphur content (0.25 per cent), would be available countrywide by January 2000. An investment of Rs. 5,600 crore is being made for setting up nine Diesel hydro desulphurisation plants. Synthetic 2-stroke engine oils meeting JASO, FC, Japan, have been introduced from Ist April 1999 for two/three wheelers.

**BOX 7.2**

**Financing of the Oil Pool Deficit**

**The Background**

- With a view to contain the deficit in the Oil Pool Account and to enable the oil companies to maintain uninterrupted supplies of petroleum products in the country, the Government announced a comprehensive package on September 1, 1997.
- It was decided that part of the liablities of the Oil Coordination Committee to the oil companies shall be cleared by issuing Special Government Bonds through one time payment to oil companies.
- The oil companies would be required to simultaneously invest the money so received from the Government in Special Government Bonds issued by the RBI.
- Under the above package, “10.5 per cent oil companies (non transferable) Special Government Bonds 2005” worth Rs. 12,984 crore, were issued by the Government to oil companies with effect from March 2, 1998.

**Current Profile**

- Out of the total bonds issued, worth Rs. 12,984 crore, bonds to the extent of Rs. 12,599 crore, have already been redeemed.
- The balance amount of bonds yet to be redeemed, stood at Rs. 385 crore only at the end of January, 2000.
- Oil companies cumulative outstandings payable by the Oil Coordination Committee, consequent to the deficit in the Oil Pool Account based on current projection, are estimated to be around Rs. 5,000 crores as on March 31, 2000.

7.30 The Global Depository Receipts (GDR) issue of GAIL has been successfully completed in the international markets on November 4, 1999. The gross proceeds from the issue were Rs. 945 crore.

7.31 The India Hydrocarbon Vision 2025, having six sub-groups covering the entire petroleum sector, has been set up for preparing a vision for the industry in the coming years. The groups will look into strategy for exploration and production, covering technology and environmental issues, development of marketing, refining, transportation and infrastructure requirements, development and utilization of natural gas, including Liquid Natural Gas (LNG), alternative fuels such as Coal Bed Methane (CBM), hydrates, Di-Methyl Ether and coal gasification, restructuring of oil industry including disinvestment, role of Government and regulatory structures, pricing and tariff reforms and long term external policy for the hydrocarbon sector, including oil security. Some of the sub-groups have already submitted their recommendations.

**Coal**

7.32 In 1998-99, coal production experienced a decline of 1.6 per cent compared to the previous year. Coking coal had a negative growth of 10.6 per cent in 1998-99 while non-coking coal, accounting for about 85.3 per cent of the total output, had a growth of -0.1 per cent in 1998-99. Coking and non-coking coal had experienced 7.4 per cent and 3 per cent growth respectively, in 1997-98. The growth rates in underground and opencast mines were -1.8 per cent and -1.6 per cent respectively, in 1998-99. Coal despatches had a negative growth of 3.1 per cent in 1998-99. Lignite production had a lower growth of 1.6 per cent in 1998-99 compared to 2.7 per cent in 1997-98 (Table 7.11).

7.33 Coal production continues to show a declining trend in the current year upto October 1999. During April-October 1999-2000, coal production was 153.24 million tonnes compared to 155.95 million tonnes for the same period in the previous year.

| TABLE 7.11<br>Trends in the Coal sector | | | | | | |
|---|---|---|---|---|---|---|
| | | | April-October | | % Change over previous year | |
| | 1997-98 | 1998-99 | 1998-99 | 1999-00* | 1998-99 | 99-00* |
| | | | (million tonnes) | | (per cent) | |
| 1. Production | | | | | | |
| (a) Opencast | 228.14 | 224.51 | 119.40 | 115.60 | -1.6 | -3.2 |
| (b) Underground | 69.03 | 67.76 | 36.55 | 37.64 | -1.8 | 3.0 |
| Total | 297.17 | 292.27 | 155.95 | 153.24 | -1.6 | -1.7 |
| 2. Production (by coal grade) | | | | | | |
| (a) Coking coal | 43.84 | 39.18 | 20.98 | 19.30 | -10.6 | -8.0 |
| (b) Non-coking coal | 253.33 | 253.09 | 134.97 | 133.94 | -0.1 | -0.8 |
| (c) Washed coal** | 10.01 | 9.72 | 5.46 | 4.92 | -2.9 | -10.0 |
| (d) Middlings | 7.55 | 7.16 | 4.02 | 3.58 | -5.1 | -10.9 |
| 3. Pithead stocks (vendible) | 27.78 | 30.83 | 22.27 | 17.48 | 11.0 | -21.5 |
| 4. Despatch | 293.92 | 284.71 | 160.12 | 165.98 | -3.1 | 3.7 |
| 5. Lignite production | 23.05 | 23.42 | 13.54 | 12.50 | 1.6 | -7.7 |
| 6. Output per man-shift (OMS) | | | | | | |
| (i) CIL | 1.93 | 2.03 | 1.88 | 1.88 | 5.2 | 0.0 |
| (ii) SCCL | 1.31 | 1.40 | 1.19 | 1.33 | 6.9 | 11.8 |

** Only CIL *Provisional

## Steel

7.34 Finished steel production increased by 2 per cent in 1998-99 to 23.82 million tonnes while production of pig iron declined by 11.5 per cent to 2.99 million tonnes. The production of pig iron by secondary producers recorded a marginal decline. In April-November 1999, both finished steel and pig iron are showing higher growths than the previous year (Table 7.12)

7.35 Consumption of finished steel in 1998-99 was 23.5 million tonnes, 4 per cent higher than 1997-98. The total volume of iron and steel exported during 1998-99 was 2.4 million tonnes, valued at Rs. 2,509 crore as against 3 million tonnes valued at Rs. 2,937 crores during 1997-98.

**TABLE 7.12**
**Output of Iron and Steel** *(million tonnes)*

| Item | 1997-98 | 1998-99 | April-November 1998-99 | April-November 1999-00 |
|---|---|---|---|---|
| **Finished Steel** | | | | |
| Main Producers | 10.44<br>(-0.9) | 9.91<br>(-5.1) | 6.36<br>(-5.2) | 7.12<br>(11.8) |
| Secondary Producers | 12.93<br>(6.2) | 13.91<br>(7.6) | 8.96<br>(13.4) | 9.99<br>(11.5) |
| Total | 23.37<br>(2.9) | 23.82<br>(1.9) | 15.32<br>(4.9) | 17.11<br>(11.7) |
| **Pig Iron** | | | | |
| Main Producers | 1.70<br>(-1.7) | 1.35<br>(-20.5) | 0.96<br>(-21.3) | 0.85<br>(-11.5) |
| Secondary Producers | 1.68<br>(7.0) | 1.64<br>(-2.3) | 1.01<br>(-17.8) | 1.25<br>(23.8) |
| **Total** | 3.38<br>(2.4) | 2.99<br>(-11.5) | 1.97<br>(-19.9) | 2.10<br>(6.6) |

Note : Figures in brackets indicate percentage change over the previous year.

## Textiles

7.36 The production of man-made fibre and yarn has increased significantly from 188 million kgs. in 1980-81 to 1,632 million kgs in 1998-99. However the ratio of cotton to man-made fibre in the Indian textile industry, remains high at 65.35 compared to the world average of 46.54. There is thus sufficient scope to increase the use of man-made fibres and utilize cotton for higher ends of the market, particularly for the export market.

7.37 The production of fabrics registered a compound annual growth rate of 5.3 per cent from 27,898 million sq. meters in 1993-94, to 36,102 million sq. meters in 1998-99. The share of the mill sector in fabric production has declined to 5 per cent in 1998-99, while that of powerloom (including hosiery) has increased to 74.7 per cent. During the current year (April-October 1999-2000) production of fabrics has increased, compared to the previous year (Table 7.13).

7.38 Exports of textile items, including jute and handicrafts, increased from US $ 6,600 million in 1992-93 to US $ 12,533 million in 1998-99, indicating a compound annual growth of 11.3 per cent. In the current year, the exports of textiles have increased by 3.5 per cent from US $ 8,052.3 million in April-November 1998 to US $ 8,334.7 million in April-November 1999. Export of cotton yarn has been 8.3 per cent during this period. Silk (6 per cent), handicrafts (8.8 per cent) and man-made textiles (7.7 per cent) have shown positive growth. Export of readymade garments, has also increased by 1.9 per cent while that of cotton fabrics and made-ups has increased marginally.

7.39 A new Quota Policy has been announced for the textiles sector, for the period 1.1.2000 to 31.12.2004. The policy seeks to maintain continuity and stability in exports and prepare the exporters for facing the challenges of the post-quota regime beginning from January 2005. In addition, it aims at better utilization of quotas and discourages 'trading of quotas'.

7.40 Two other major initiatives viz. Cotton Technology Mission (CTM) and Technology Upgradation Fund Scheme (TUFS) have been proposed. The CTM has four mini-missions, with two dealing with improving productivity and quality of production and the others dealing with the problem of minimizing contamination and improving existing ginning and pressing facilities. The TUF has already come into effect from April 1, 1999. The Scheme provides for reimbursement of five percentage points on the interest charged by lending agencies on projects of technology upgradation.

7.41 The Expert Committee, appointed to make suitable recommendations for strengthening the domestic industry in the face of competition, has submitted its report in August 1999. The report is currently under examination. The recommendations include measures for introducing greater transparency, avoiding excessive regulations, translating the comparative advantages into competitive strength and promoting exports.

## Information Technology and Electronics

7.42 The Information Technology Bill, aiming to provide legal framework for facilitating electronics commerce in the country, has been introduced in the winter session of the Parliament. The Bill provides legal framework for recognition of electronic contracts, prevention of computer crimes, electronic filing/documents etc. Amendments have been proposed in the Indian Evidence Act, Indian Penal Code and the RBI Act. The mechanism of digital signature has been proposed for addressing jurisdiction, authentication and origination.

7.43 The Government has set up a new Ministry of Information Technology in October 1999, as the nodal agency for facilitating all the initiatives in the Central Government, the State Governments, academia, the private sector and successful Indian IT professionals abroad. The Ministry will implement a comprehensive action plan to make India an IT superpower in the next century and achieve a target of US $ 50 billion in software exports, by 2008. It will emphasise

**TABLE 7.13**

**Production of Fabrics**

*(million sq.mtrs)*

| Sector | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | April-October* 1998-99 | April-October* 1999-00 |
|---|---|---|---|---|---|---|---|
| Mills | 2271 | 2019 | 1967 | 1948 | 1785 | 1065 | 969 |
| Powerlooms (inc. hosiery) | 19724 | 22239 | 24885 | 27344 | 26966 | 15311 | 16684 |
| Handlooms | 6180 | 7202 | 7456 | 7604 | 6792 | 3982 | 4216 |
| Others | 431 | 498 | 540 | 540 | 559 | NA | NA |
| **Total** | **28606** | **31958** | **34848** | **37436** | **36102** | **20358** | **21869** |
| | | | **Share in Output (per cent)** | | | | |
| Mills | 7.9 | 6.3 | 5.6 | 5.2 | 5.0 | 5.2 | 4.4 |
| Powerlooms (inc. hosiery) | 69.0 | 69.6 | 71.4 | 73.0 | 74.7 | 75.2 | 76.3 |
| Handlooms | 21.6 | 22.5 | 21.4 | 20.3 | 18.8 | 19.6 | 19.3 |
| Others | 1.5 | 1.6 | 1.6 | 1.5 | 1.5 | - | - |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

*** Provisional NA: Not available**

upon Internet revolution, particularly on the creation of useful contents in Indian languages. IT-enabled services, IT education, electronics and computer hardware manufacturing and exports, silicon facility, e-commerce and Internet based enterprises, will be actively promoted.The Ministry will also implement IT enabled distance education programmes in collaboration with leading academic institutions.

7.44 The Government is taking all necessary steps to make India a global information technology superpower. It has been recommended that each Ministry must allocate 2-3 per cent of its budget on IT promotion. This is a step towards the development of domestic software industry and a conscious move towards electronic governance. The Ministry of Information Technology has initiated institutional mechanisms for facilitating initiatives towards greater utilisation of IT as an enabling tool for efficiency and effectiveness in Government. Three test beds in electronic governance, have been initiated in close association with the Government of Andhra Pradesh.

7.45 A series of measures have been taken to develop a road map for India in e-commerce. These are in information & communication technology infrastructure, legal and regulatory framework, technology for e-commerce including test-beds, issues related to international domain names etc. To set up the mechanism and infrastructure for implementation of Cyber laws, Department of Electronics has initiated efforts for developing technology for issue of digital signature certificate, procedure for certification authorities and other security guidelines. Efforts are also on to develop image water marking technology for an electronic copyright system.

7.46 The Government has approved setting up of an IT venture capital fund of Rs.100 crore for software companies. This will have contributions from the Ministry of Information Technology, SIDBI (Small Industries Development Bank of India), Financial Institutions, private companies and NRIs.

**Y2K**

7.47 The Union Budget (1999-2000), permitted all expenditure incurred by the corporate sector in the current year for making their systems Y2K compliant, to be treated as revenue expenditure in the next financial year, for income tax purposes. All the critical sectors have achieved Y2K compliance. The stress is now being laid on testing, simulation, third party audit and contingency planning.

7.48 The software industry has emerged as one of the fastest growing sectors in the economy with a compound annual growth rate exceeding 50 per cent in the last five years and a likely turnover of US $ 4 billion and exports worth US $ 2.6 billion during 1998-99. The Indian electronics industry is estimated to have had production worth Rs. 41,140 crore during 1998-99, compared to Rs. 32,070 crore during 1997-98, registering a growth of over 28 per cent. Consumer electronics, with colour TV industry in particular, continued to witness phenomenal growth.The industry (excepting aerospace and defence electronics), is now fully delicensed. Fiscal, investment and trade policies for the sector have also been liberalised.

**Food Processing**

7.49 Till November 1999, 5,718 IEMs have been filed in the food processing sector envisaging an investment of Rs. 53,700 crore. Apart from these, 1,111 approvals have been granted till October 1999 envisaging an investment of Rs. 19,086 crore for setting up of 100 per cent Export Oriented Units/Industrial Licences, in various sectors of food processing. Out of a total investment of Rs. 72,786 crore approved in the sector, the foreign investment involved is Rs. 9,125 crore. 848 projects have already gone into commercial production till September 1999.

7.50 The installed capacity of fruits and vegetables processing industry has been steadily increasing. The capacity of the industry (excluding fried and sun-dried fruits and vegetable products) increased from 7.08 lakh tonnes as on January 1990 to 20.8 lakh tonnes as on January 1999. Export of marine products during 1998-99 were worth 4,626.87 crore with a share of 3.32 per cent in the total export earnings during the year. The production of milk powder and infant milk food is estimated to have increased from 2.22 lakh tonnes in the calendar year 1998 to 2.25 lakh tonnes in the calendar year 1999.