ANNUAL REPORT
1995-96

GOVERNMENT OF INDIA

MINISTRY OF CHEMICALS & FERTILIZERS

(DEPARTMENT OF CHEMICALS AND PETROCHEMICALS)

NEW DELHI

CONTENTS

INTRODUCTION

The Department of Chemicals and Petrochemicals has been a part of the Ministry of Chemicals and Fertilizers from 5-7-1991. The Department is entrusted with the responsibility of policy planning, development and regulation of Chemicals, Petrochemicals and Pharmaceutical Industries. The business allocated to the Department is listed at Annexe-I.

Shri Ram Lakhan Singh Yadav held charge as Minister for Chemicals & Fertilizers throughout the year under report.

Shri Eduardo Faleiro held charge as Minister of State throughout the year.

On appointment of Shri K. K. Mathur as Chairman, India Trade Promotion Organization, Shri N.R. Banerji, took over from him as Secretary in the Department of Chemicals and Petrochemicals with effect from 12-9-95.

2—762 M/o C & F/95

PERFORMANCE OF INDUSTRIES

A. Drugs and Pharmaceuticals

The Pharmaceutical Industry of India is today one of the largest and most advanced among the developing countries. Indian pharmaceutical industry manufactures bulk drugs belonging to several major therapeutical groups requiring various manufacturing processes and has developed excellent facilities for production of all dosage forms like tablets, capsules, liquid, orals, injectables etc. This achievement is strengthened by an assurance with regard to the quality of the products. Today India is in a position to meet 70% of the country's requirement of bulk drugs and almost all the demand for formulations. The setting up of the Penicillin factory at Pimpri, Pune in the early 50's and the construction of Indian Drugs & Pharmaceuticals Ltd. (IDPL) plants at Rishikesh and Hyderabad in the 60's have been the milestones in the history of the pharmaceutical industry in the country. These have been the building blocks on which the structure of the pharmaceutical industry in India has been built. The public sector investment in the pharmaceutical industry has been the catalytic engine for the growth of the industry in the last three decades.

1. PRODUCTION

The following table shows the production of bulk drugs and formulations from 1985-86 to 1994-95 :

(Rs. in crores)

Year	Bulk Drugs	Formulations
1985-86	416.00	1945.00
1986-87	458.00	2140.00
1987-88	480.00	2350.00
1988-89	550.00	3150.00
1989-90	640.00	3420.00
1990-91	730.00	3840.00
1991-92	900.00	4800.00
1992-93	1150.00	6000.00
1993-94	1320.00	6900.00
1994-95	1518.00	7935.00

The estimated demand and production achievements of drugs and pharmaceuticals is given in Annexure II.

The Drugs & Pharmaceuticals sector continued to maintain steady growth in terms of production as well as range of products in 1994-95. In the year 1993-94, the production of bulk drugs and formulations was valued at Rs. 1320 crores and Rs. 6900 crores respectively. In 1994-95, the production of bulk drugs and formulations is estimated to be of the order of Rs. 1518 crores and Rs. 7935 crores respectively showing a growth rate of 15% over the previous year's production. During 1994, several proposals for foreign collaboration for joint ventures, research and development, establishing new undertakings/expansion of existing units (manufacture of new articles in the existing units) were received. Following delicensing of the pharmaceutical industry, a number of IEMs for manufacture of various bulk drugs/drug intermediates/formulations were received. The major items covered in IEMs include various bulk drugs, intravenous fluids, formulations, etc.

2. EXPORT

From a meagre Rs. 46 crores worth of pharmaceutical exports in 1980-81, the exports have risen to over Rs. 2100 crores during 1994-95. Bulk drugs constitute about 60% of exports. The details of the exports (excluding Castor Oil) during the last 10 years are as follows :

(Rs. in crores)

Year	Finished formulations	Bulk drugs	Total
1985-86	106.59	33.36	139.95
1986-87	102.12	87.16	189.28
1987-88	88.25	139.71	227.96
1988-89	157.29	242.87	400.00
1989-90	314.20	350.50	664.70
1990-91	371.40	413.40	784.80
1991-92	558.50	722.60	1281.10
1992-93	553.70	856.60	1410.30
1993-94	771.80	1029.60	1801.40
1994-95	924.00	1260.70	2184.70

During April 1994—March 1995, total exports (excluding castor oil) amounted to Rs. 2185 crores which was 21% higher than the performance during 1993-94. The export of formulation was of the order of Rs. 924 crores which is an increase of 20% over the achievement during the previous year. In the case of bulk drugs the exports were of the order of Rs. 1261 crores which is an increase of 25% over the last year.

In dollar terms too, the increase in the case of formulations was to the extent of 20%, bulk drugs 25% and increase in overall exports was 23% over the performance during last year.

During the first ten months of 1995-96 also, the export performance has been encouraging.

(Value in Million US $)

	Exports Apr/Jan., 96 (1)	Exports Apr/Jan., 95 (2)	% percentage increase
Basic drugs	290.8	278.5	+ 4.41
Finished formulations	307.0	211.6	+ 45.08
Total	597.8	490.8	+ 21.97

(*Source*: CHEMEXCIL, Bombay)

3. IMPORTS

As per information available from DGHS, imports of bulk drugs and formulation for the last five years have been as under:

Value of Imports (Rs. in crores)

Year	Bulk Drugs	Formulations	Total
(1)	(2)	(3)	(4)
1990-91	322.57	84.94	407.51
1991-92	458.51	96.12	554.63
1992-93	508.39	119.51	627.90
1993-94	612.74	138.33	751.07
1994-95	811.43	173.02	984.45

(*Source*: DGHS)

4. RESEARCH AND DEVELOPMENT

Programme for promoting R&D in Drugs and Pharmaceutical Sector.

A new programme for promoting R&D in Drugs and Pharmaceutical Sector was initiated by the Department of Science and Technology (DST). For the purpose, Planning Commission has made a special allocation of Rs. 10 crores in 1994-95 for the remaining years of the 8th five year plan. A two tier structure has been set up by DST to manage the programme viz. an Apex Executive Committee at the Secretaries level, chaired by Secretary, DST and an Expert Committee at the operational level.

Modalities

To work out the modalities of funding under the programme, Secretary DST took a meeting with leaders of Pharmaceutical Industry, representatives of Financial Institutions and Expert Committee members in 1994, wherein it was decided to invite proposals from Industry and publicly funded R&D laboratories for collaborative programmes specifically for (a) New Drug discovery, (b) Innovative routes for off-patent/generic drugs and intermediates, (c) Standardization of traditional medicinal formulas and (d) Chiral-Synthesis/resolution of recimic mixture.

The Expert Committee has held seven meetings so far to consider the proposals. Twenty two project proposals were considered by the Expert Committee and the Apex Executive Committee cleared 10 proposals in 2 meetings.

Creation of National facilities for New Drug Development

To be globally viable in R&D, high level expertise and adequate human resources as also modern facilities in specified areas of drug developments are required. It was therefore, decided that the DST programme, besides new drugs development projects, should also support creation of facilities that were essential for new drugs development. Accordingly, facilities that were needed urgently and that would be cost effectived created namely: (a) DNA gyrase screening facility; (b) Quantity-Structure-Activity-Relationship (QSAR) facility; (c) Immunomodulators modelling and Screening; and (d) Pharmacological testing were identified. Proposals on these were invited from institutions having background and expertise in the area. One proposal has already been received, referred to and considered by the Committee in March, '95.

5. **WTO agreement and the pharma industry**

India was among the 111 Member nations that signed the Final Act embodying the results of the Uruguay Round of Multilateral Trade Negotiations at Marrakesh on 15th April, 1994. The Agreement establishing the World Trade Organisation (WTO) concluded at the Uruguay Round incorporates various Agreements negotiated under the Uruguay Round including the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) which has a bearing on the Indian pharmaceutical industry. The WTO Agreement came into force on 1-1-1995. The TRIPS agreement provides for a transition period of 10 years from 1-1-1995 to India for granting product patent. During the transitionary period, India will have to provide exclusive marketing rights for drugs patented after 1-1-1995 subject to various conditions stipulated in the TRIPS Agreement. There have been apprehensions that signing of the GATT accord would lead to sharp increases in the prices of drugs in the market which are incorrect and unfounded. The GATT Accord will not have any impact on the prices of drugs that are currently in the market. The impact of the GATT Accord on the pharmaceutical industry would be confined to only those drugs which come into the market on the basis of the patents granted after its coming into force. However, the likely impact on the prices of patented drugs, which will come into the market in the beginning of the next century, will also depend on a number of factors like the licensing and marketing strategies including local manufacturers by the patent holders and availability of therapeutic equivalent substitute non patented drugs.

In order to meet the challenges of the Post Uruguay Round Era, the industry has to gear itself to the new patent regime. Various measures have been initiated by the Council of Scientific and Industrial Research (CSIR) in this regard.

6. **Review of the Drug Policy, 1986**

The first ever Drug Policy was announced in 1978 based on the recommendation of a Committee known as Hathi Committee. This policy was revised subsequently and a new policy was announced in December, 1986. In 1989, it was decided to review the policy in response to a large number of representations from Members of Parliament mainly relating to the list of price controlled drugs and later on, it also took into account the impact of the Industrial Policy announced in July, 1991. A Standing Committee constituted by the Government on Feb. 5, 1990, considered all matters connected with the review of Drugs (Prices Control) Order, 1987 (DPCO '87) and the representations made on various issues concerning from control, including inclusion/exclusion of drugs in the scheduled categories. Also to assess the situation in realistic terms, discussions were held with various interest groups like Consumer Association, Indian Medical Association, Voluntary Health Organisations, Trade and Industry at the Ministerial levels. The views expressed were further debated in inter-Ministerial meetings. On the basis of these deliberations a background note was laid on the Table of both the Houses on 12-8-1992 for eliciting the views of Members of Parliament as desired by the Prime Minister. The matter was discussed in the Monsoon Session of 1993.

After considering all the viewpoints and broad-based discussions at various levels, the Government finalised the "Modifications in the Drug Policy, 1986" in September, 1994, and new Drugs (Prices Control) Order, 1995 within a record time of less than 4 months, on 6th January, 1995. For the purpose of fixation/revision of prices of medicines and implementation of prices by the Industry, National Pharmaceutical Pricing Authority (NPPA) is in the process of being set up for which Ministry of Finance has accorded approval on 25-5-1995. The creation of the post Chairman, NPPA and Member Secy, NPPA has also been approved.

Besides a separate Deptt. of Indian System of Medicines and Homoeopathy has been set in the Ministry of Health on 8th March, 1995 and Ministry of Health is working on drafting of the Act for setting up of the National Drug Authority.

Government has already taken the following steps for implementing the decision contained in the "Modifications in Drug Policy, 1986" :—

(a) Appropriate orders regarding abolition of industrial licensing except for certain selected drugs have been issued.

(b) Conditions stipulated for mandatory supply of percentage of bulk drug production to non-associated formulators have been abolished.

(c) Ratio parameters linking bulk drugs and formulation production and limiting the use of imported bulk drug have been abolished. While fixing prices an additional incentive of 4% for manufacture from basic stage is being given.

(d) The inter-ministerial Group which was set up to decide on measures for giving further impetus to R&D in the drug sector has already submitted its report.

(e) DPCO, 1995 has come into force. It contains suitable provisions based on the modifications in the Drug Policy of 1986—

3—762 M/o C.& F/95

(f) Applying the new criteria, a list of 76 bulk drugs which would be under price control has been published and the work of price fixation has already started. The system of fixing ceiling prices for commonly marketed standard pack sizes of price controlled formulations has been put into force.

7. **Rifampicin Policy**

Rifampicin is an important anti-TB drug. India is a major consumer of this drug. The domestic production is not sufficient to meet indigenous demand. The indigenous basic stage production was started by M/s. Gujarat Themis Biosyn Limited (GTBL) in November, 1991 and M/s Lupin Chemicals in April, 1993. The liberalised import policy in 1992-93, threatened the indigenous production which was still in its infancy and a need was felt to protect and encourge the basic stage manufacture of the drug in consonance with the provisions of the Drug Policy. As such, a tariff of 10% was imposed on the imported intermediates in 1992-93 which was increased to 25% in 1993-94 and these intermediates were put in the Negative List of Imports.

In order to support indigenous production and to prevent avoidable import, a policy for the import of intermediates for the manufacture of Rifampicin has been framed. The policy is related to regulating import to fill the gap in indigenous production and demand. The Rifampicin Intermediate Policy for the year 1995-96 (April, 1995 to March, 1996) has since been announced. A ratio of 70 (indigenous : 30 (imported) has been fixed under the policy.

8. **Pen. G Policy**

Potassium Penicillin 'G' First Crystals (Pen. G) is the main raw material for the manufacture of a wide range of life saving antibiotics. The major producers of Pen. G. are the Indian Drugs & Pharmaceuticals Ltd. (IDPL) and Hindustan Antibiotics Ltd (HAL). In order to increase production in the country, the item which was reserved for PSUs, was de-reserved and private firms were also allowed to manufacture Pen. G.

Since the indigeneous production of Pen. G is not sufficient to meet the country's requirement, it becomes necessary to frame a Pen. G Policy every year to regulate the import and also for allocation of indigenous material, after taking into account the demand and supply in the previous year, the estimated production as well as the country's demand for the current year. In 1995-96, three new units have gone on stream, viz. M/s. SPIC Pharmaceuticals Ltd. J. K. Pharmachem Ltd. and Torrent Gujarat Biotech Ltd. Besides HAL has entered into a joint venture with Max GB Ltd. which would further boost the indigenous produciton of Pen G. Taking these factors into account, during the initial phase (April-August, 95), the 1994-95 Pen G policy was extended and from September-December a new policy fixing the ratio of 70 (indigenous) : 30 (imported) was fixed.

This has been further reviewed and from 6-2-96 to 31-3-96, the ratio has been changed to 85 indigenous and 15 imported. Old units have been given 25% growth over their actual lifting during 1994-95.

Drugs Prices Equalisation Accounts (DPEA)

The Three Member Committee constituted under the Charmanship of a retired Judge of the Delhi High Court to review the entire matter relating to liabilities assessed against the drug Companies, is in the process of finalising its recommendations on case to case basis after hearing the concerned Companies. Govt. has sent briefs in 65 important DEPA cases to the Committee for its recommendations. The Committee has already concluded hearing in 10 cases and its recommendations in 3 cases have been received by the Govt. The hearings in the remaining cases are in progress.

There were around 347 price controlled bulk drugs under the DPCO, 1979. Till date, liabilities have been assessed covering around 47 bulk drugs only. Fresh notices to assess liabilities in the remaining bulk drugs are under issue. More than 500 such notices have already been sent to the concerned Companies.

The present tenure of the Three Member Committee is upto 20-6-1996.

B. **Chemicals, Pesticides and Allied Industries**

The Chemical Industry in India is well established. The Country has recorded a rapid growth in the manufacture of Chemicals during the last few years. Prominent among these are Caustic Soda, Soda Ash, Carbon Black, Phenol, Acetic Acid, Methanol and Azo Dyes. The production and availability of Chemical are by and large sufficient and imports have been curtailed. However, some of the inputs for the industry are in short supply. In certain cases of chemicals the existing capacity is not sufficient to meet the demand e.g. Titanium Dioxide, Citric Acid, MDI and TDI.

2. The Government is supporting modernisation of the industry so as to improve its efficiency by lowering operating costs, since technology obsolescence is one of the prominent features of the chemicals sector.

3. In keeping with the liberalised industrial policy. Industrial licensing has been done away with for all chemical industries except for a small list of hazardous chemicals. It is expected that the closely held technologies for various chemicals would now be available.

4. The current Import-Export Policy 1992-97 eliminates licensing, quantitative restrictions and other regulatory discretionary controls. The majority of chemicals can now be imported or exported through simplified procedures.

Chemicals

5. The country has recorded a rapid growth in the manufacture of chemicals during the last few years. Prominent among these are Caustic Soda, Soda Ash, Carbon Black, Phenol, Acetic Acid, Methanol and Azo Dyes. A statement on the actual production achieved during 1994-95 and the likely production in 1995-96 for important chemicals is given in Annexure-III.

Dyes and Dyestuffs

6. Dyestuff Industry provides important input to many consuming industries contributing to the national economy. It is capable of meeting most of the local demands. In the organised sector, the indsutry is self-sufficient in terms of most of the inputs. There are around 50 units in the organised sector having a total annual installed capacity of around 45 lakh tonnes against which the production achieved during 1994-95 was 30.74 lakh tonnes. The production for various classes of dyestuffs in 1995-96 is estimated to be 32.54 lakh tonnes. A large quantity of dyes and dyeintermediates is being exported and valuable foreign exchange is being earned in this sector.

7. **Pesticides**

Pesticides including insecticides, fungicides, weedicides etc. are used extensively in Indian agriculture and Public health. The pesticide industry in India continues to make impressive progress and today more than 60 technical grade Pesticides are being successfully manufactured in the country. More than 125 units are currently engaged in the manufacture of these technical grade pesticides and over 500 units are making pesticide formulations. As a result of the increased production of pesticides in the country import of technical grade pesticides has declined considerably. The estimated production of technical pesticides during 1995-96 is over 86,000 MT from an annual installed capacity of 126.6 lakh MT. As compared to this, the production during 1994-95 was around 89.88 lakh MT.

To utilise the idle capacity available with the pesticides units, the country has entered the competitive field of export of pesticides. During 1994-95 the country exported pesticides valued at Rs. 211.00 crores against the export of pesticides worth Rs. 192.3 crores during 1993-94.

The country has started producing some new pesticides but the manufacturers are continuing to import their intermediates in the absence of technology for producing them. Efforts are being made to acquire the right technology to manufacture intermediates for pesticides like Butachlor, Endosulfan etc.

Alcohol & Molasses

The Molasses Control Order, 1961 under which the prices and distribution of molasses were regulated and Ethyl Alcohol (Price Control) Order, 1971, which controls the prices, were rescinded on 10th June, 1993 with a view to ensure free availability of these products on competitive prices to the downstream industries. However, some problems had arisen in view of some State Governments continuing to regulate molasses and alcohol as also due to the lower production of molasses and consequent increase in prices of molasses and alcohol in the country. Various issues were discussed in the Excise Ministers' conference held on 4-11-93 wherein the conference had set up a Working Group of Excise Ministers of some States. The report of the Working Group was placed before the Excise Ministers recently. However, no consensus could emerge in the meeting. In the meantime, the Judgements of Patna High Court and Allahabad High Court has come on the writ petitions filed by Sugar Mills against the validity of the Molasses Control Orders of the State Governments were received. The Sugar Mills have filed SLP in the Supreme Court. Action will be taken after the Judgement of the Supreme Court on the two SLPs filed by the Sugar Mills.

Export

Till 1988-89, country was not able to export chemicals in larger quantities. However, the Indian Chemical Industry, has shown an impressive performance in the field of exports during the last few years.

There has been a substantial increase in exports in the chemical sector in the first half of the current year as shown in the Table below :—

(Value in Rs. crores)

	April to Sept., 1994	April to Sept., 1995	Percentage increase
I. Dyes & Dye Intermediates	523.4	581.6	11.1
II. Basic inorganic & Organic Chemicals including Agro-Chemicals.	315.2	580.1	84.0
	839.6	1161.7	38.6

(Source : CHEMEXCIL, Bombay)

Chemical Weapons Convention

India is one of the original 130 signatories to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention) which concluded in 1993. The Convention will come into force 180 days after the date of deposit of the 65th Instrument of Ratification. So far 160 countries have signed the Convention out of which as on 1-6-96, 53 have ratified. The Treaty is expected to come into force sometime in late 1996 or early 1997.

2. The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC) is a global disarmament agreement. Upon entry into force the Convention will be implemented by the Organisation for the Prohibition of Chemical Weapons (OPCW) established in The Hague.

3. The CWC prohibits all development, production, acquisition, retention, stockpiling, transfer and use of chemical weapons. It requires each State Party to destroy the chemical weapons and chemical weapons production facilities it possesses, as well as any chemical weapons it may have abandoned on another State's territory. State Parties are not to use riot control agents as a method of warfare, not to engage in military preparations for use of chemical weapons and not to assist or encourage others to engage in any of the prescribed activities. Given the numerous industrial chemical plants and military installations in the world and the relative simplicity of producing chemical warfare agents, the verification provisions of the CWC are rather elaborate and stringent. The Convention will be verified through a combination of reporting requirements, routine on-site inspections of declared sites and short notice challenge inspections. The verification provisions of the CWC will affect not only the military sector but also the civilian chemical industry, world wide, through certain restrictions and obligations regarding the production, processing and consumption of chemicals that are considered relevant to the objectives of the Convention.

4. The Major obligations as far as India is concerned would relate mainly to the Indian chemical industry. Fortunately, in the past few years, there has been a very healthy growth of chemical industry in India and there have been substantial exports of pharmaceuticals, dyes and pesticides. The Indian chemical industry is highly developed encompassing many sectors like organic and inorganic chemicals, plastics, fibres, fertilizers, dyestuffs, paints, speciality chemicals, drugs and pharmaceuticals etc. As a result of innovative low cost technologies evolved by the chemical industry, India is increasingly becoming internationally competitive in this sector. It has to be, therefore, ensured that the momentum of growth of the chemical industry and particularly its exports do not receive a set back on account of any non-fulfilment of the obligations under the Chemical Weapons Convention. The Chemical Weapons Convention stipulates verification procedures including surprise (challenge) verification which could adversely affect the trade and exports of chemicals in India if we lack in the implementation. It is, therefore, essential that all requirements with reference to various obligations are fulfilled in time. The Convention stipulates submission of initial declarations within 30 days of the entry into force of the Convention and annual declarations subsequently not later than 90 days after the beginning of each following calendar year. Substantial changes in declarations are also required to be reported during the year. As far as India is concerned there is a possibiliy of a large number of chemical units running in thousands and located through out the country being covered for reporting requirements under the Convention.

5. The Deptt. of Chemicals and Petrochemicals has taken a number of measures to ensure that the Indian industry is sensitised with the requirements of the Chemical Weapons Convention so that they are fully prepared to fulfil the obligations when the Convention comes into force. The Department is making all efforts to ensure that the growth of the chemical industry is not affected while fulfilling the obligations of the Convention. A number of Seminars, Workshops, Meetings and discussions at various levels have been organised for this purpose. Trial inspections have also been carried out on some of the industrial units which are engaged in the production and manufacturing of chemicals relating to Chemical Weapons Convention. The experience of these inspections have also been shared with the representatives of the industry in various forums and seminars. A meeting was also organised with the representatives of industry Associations so as to apprise them of the various obligations under the Convention and the various issues being discussed in the expert group meetings at The Hague. In view of the implications of the Convention, an exclusive discussion was organised in the Consultative Committee of the Ministry of Chemicals and Fertilizers and the Members of Parliament were apprised of the implications of the Convention. It was emphasised in the Consultative Committee meeting that the interest of the Indian chemical industry should be safeguarded by abiding by the obligations under the Convention.

6. The Deptt. of Chemicals and Petrochemicals will be playing a crucial role in the implementation of the Chemical Weapons Convention in view of its large scale implications for the Indian chemical industry. The interactions with the industry at various levels will be energised and increased by way of Seminars, Trainings, Workshops, trial inspections, declaration exercise etc. The Department will also be interacting at the international level to ensure that various issues pertaining to the chemical industry being discussed are resolved in a manner as envisaged in the Treaty not hampering the legitimate growth of the chemical industry.

C. PETROCHEMICALS INDUSTRY

Petrochemicals are chemicals manufactured from petroleum feedstock, such as naphtha, gas, etc. Basic chemicals such as Ethylene, Propylene and Butadiene are manufactured from naphtha. Ethylene and Propylene are converted into plastics which are also known as polymers. Butadiene is converted into synthetic rubbers.

The other set of chemicals manufactured from naphtha are basic aromatic chemicals such as Benzene and xylenes. These are used for making intermediates such as Caprolactum and DMT/PTA. These intermediates are used for production of synthetic fibres and yarns such as Nylon Filament Yarn (from Caprolactum) and Polyster Fibre and Yarns (from DMT/PTA).

Kerosene is another petroleum fraction which is used for making Linear Alkyl Benzene (LAB), which is the raw material for detergent powder and cakes.

Petrochemicals can be broadly categorised as :—

(i) Plastics

(ii) Synthetic Rubbers

(iii) Synthetic Fibres

(iv) Intermediates (DMT, PTA etc.)

(v) Feedstocks (Ethylene, Propylene, Benzene etc.)

Major Petrochemicals Complexes being set up

To meet the growing demand of petrochemicals in the country, Government have sanctioned several mega petrochemical complexes as follows :—

OLEFIN COMPLEXES

PROJECT	FEEDSTOCK	ETHYLENE CAP. (000MT)	INVESTMENT (RS. CRORES)
IPCL-GANDHAR	GAS	300	3500
RELIANCE-HAZIRA	NATURAL GAS LIQUID/NAPHTHA	750	4000
RELIANCE-JAMNAGAR	"	800	1800
GAIL-AURIYA (U.P.)	GAS	300	3500
ASSAM	GAS/NAP	300	3090
HALDIA	NAPHTHA	300	3300
VIZAG	NAPHTHA	300	3500
NOCIL	NAPHTHA	300	5300
KARNATAKA STATE INDL. INV. DEV. CORPN. (MANGALORE)	NAPHTHA	300	1800*
PSIDC	NAPHTHA	300	1800*
	AROMATIC COMPLEXES		
J K AROMATICS (BHARUCH, GUJARAT)	NAPHTHA	140P-XYLENE 30 O-XYLENE 30 BENZENE	900
NAPCO (MANALI, TAMILNADU)	NAPHTHA	140-P-XYLENE 200 PTA 30 O-XYLENE 90 BENZENE 14 TOLUENE	1900
GRASIM (MANGALORE, KARNATAKA)	NAPHTHA	75 BENZENE 65 TOLUENE 250 P-XYLENE 65 O-XYLENE	1200

(*only for cracker)

4—762 M/o C & F/95

These projects involve a total investment of over Rs. 35000 crores if all of them materialise in the next few years. This would mean that India will become largely self-sufficient in petrochemicals.

Production and Consumption Trends

The Petrochemical sector in India has made a rapid stride in terms of growth in production and consumption. The broad details in this regard are as under :—

(Figures in '000 MT)

Category	1994-95		1995-96		2000 AD*
	Production	Consumption	Production	Consumption	Demand Projections
1. Synthetic Fibres	680.97	766.22	750.91	808.86	
2. Polymers	1128.49	1635.13	1260.41	1837.94	The figures are being updated by the Working Group on Petrochemicals
4. Synthetic Rubber	53.35	86.19	56.43	122.38	
5. Synthetic Detergent	213.56	213.69	225.12	225.12	
6. Overall	2076.37	2701.23	2292.87	2994.30	

Synth. Fibres include—AF, NFY, NIY/TC, PFY, PSF

Ploymers include—LDPE, LLDPE, HDPE, PP, PS & PVC

Syn. Rubber includes—SBR, PBR

Syn. Detergent includes—LAB

The data on production of major petrochemical items during 94-95 and Anticipated/Estimated Projections for the year 95-96 and anticepated projections for the year 1996-97 are given in Annex IV.

As part of the liberalisation policy of the Government, tarff structure on various petrochemicals was rationalised further. Custom duties on various products were reduced in the Annual Budget for 1995-96. The peak rate of custom duty was brought down to 50%. The custom duty on synthetic fibres was brought down to 45% whereas that on polymer was brought down to a level of 40%.

A number of steps were taken spacing by the Department of Chemicals and Petrochemicals with a view to povide level playing field to the domestic industry. Some of the major steps taken are :—

(i) Items such as LDPE, LLDPE, HDPE, SBR, PVC etc. continued to be under the "Sensitive List for Imports" against Value Based Advance Licences based on the recommendations by the department.

(ii) Imports of feedstocks Naphtha, LPG and kerosene continued to be under Open General Licence. The benefit of this import policy is however not fully available to the industry as the port facilities required for large scale import of these items are available with the oil industry and thus are available to the petrochemical industry in a limited way. The petrochemical industry is setting up their own facilities which would take about two years to be ready.

(iii) The recommendations on tariff restructuring and manpower development made by the Expert Group on Petrochemicals under the chairmanship of Dr. Rakesh Mohan are being implemented in a phased manner. Since the Expert Group submitted its report in 1993, the department is planning to set up another working group to examine the present status of the petrochemical sector, forecast demand projections upto 2005 and suggest measures to improve the global competitiveness in the domestic industry.

(iv) The Jute Packaging Order (JPO) for compulsory packaging of sugar, foodgrains, urea and cement has been relaxed at the instance of the Department of Chemicals and Petrochemicals. As against 100% compulsory packaging of the above items in jute bags, the compulsory packaging in case of fertilizers/cement is now 50%. The Department is examining the issue of further dilution of the JPO.

(v) As a result of continuous efforts made by the department, Ministry of Petroleum and Natural Gas modified the pricing mechanism for LPG used as a feedstock by the petrochemical units from the administered pricing mechanism to "Import Parity" pricing based on monthly international quotations. The price is fixed on a monthly basis w.e.f. March 1995.

The department is taking steps to declare itself as a Nodal Agency for Plastic Waste Management in the country. Although the issue of Plastic Waste Management in India is not yet relevant due to the low per capita consumption, this step is a measure which would ultimately lead to the goal of increase in consumption of plastics which is necessary to preserve the ecological balance as plastics help conserving natural resources.

BHOPAL GAS LEAK DISASTER

1. Background :

There was an emission of MIC gas from the pesticides plant of Union Carbide India Limited (a subsidiary of Union Carbide Corporation of USA) at Bhopal (Madhya Pradesh) on 2nd/3rd December, 1984. The accident caused huge loss of life and property. About 6 lakh claims have been filed for grant of compensation.

After the disaster, the Government of India framed an Act known as Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985. The Act conferred powers on the Central Government to represent all claimants in appropriate forums, appoint a Welfare Commissiner and other staff to discharge functions connected with hearing of the claims and distribution of compensation. Under the Act, the Government has framed a scheme known as the Bhopal Gas Leak Disaster (Registration and Processing of Claims) Scheme, 1985 for registration, processing, determination of compensation to each claim and appeals, if any, arising therefrom.

2. Legal case :

After protracted legal battles in the Bhopal District Court and M.P. High Court, the matter came up before the supreme court. In a settlement dated 14/15th February, 1989, the supreme court of India ordered compensation of US $ 470 million to be paid by UCC and UCIL in settlement of all civil and criminal cases. However, a number of review petitions were filed by the Social Action Groups in the Supreme Court challenging the settlement and also decided to support the review petitions challenging the settlement. The Supreme Court after hearing the review petitions announced its judgement on 03.10.91 and upheld the settlement amount without extinguishing the criminal liability. The compensation amount which had been deposited by UCC and UCIL with the Supreme Court, was transferred to the Welfare Commissioner in October, 1992.

3. Relief Measure :

Immediately after the gas leak disaster in December, 1984, the State Government and the Central Government undertook a number of relief measures to provide succour to the victims and the families of the dead. The relief was both in the form of financial assistance as well as distribution of essential commodities free of cost, i.e. ration, milk, houses and loans to start business.

4. Action Plan for rehabilitation of Bhopal Gas Victims :

An Action Plan with a capital outlay of Rs. 163.10 crores was approved by the Central Government for the Medical, Economic, Social and Environmental rehabilitation of the Bhopal gas victims. It was decided that the Central Government and the State Government of Madhya Pradesh would meet the expenditure on the Action Plan in the ratio of 75 : 25 over a period of 5 years from 01.04.1990 to 31.03.1995. On the expiry of the Action Plan period on 31.03.1995, some of the works/programmes remained incomplete and more than Rs. 28 crores out of the outlay of Rs. 163.10 crores remained unexpended. The Government has therefore, extended the period of the Action Plan upto 30.9.96, within the earlier approved outlay of Rs. 163.10 crores, to complete the existing incompleted schemes.

The State Govt. have also submitted a proposal for enhancement of the outlay of the existing plan from Rs. 163.10 crores to Rs. 201.84 crores. This proposal is under consideration.

The State Govt. has also submitted a new Action Plan from 1996-97 to 2000-2001 for an outlay of Rs. 177.05 crores. This proposal is also under consideration of the Government.

5. Interim Relief :

In 1989, the Supreme Court directed payment of interim relief to the families of the dead and also to the persons disabled by the gas leakage.

From 01.04.1990, Government started distributing interim relief to 5 lakh persons of the 36 severely affected wards @ Rs. 200/- p.m. This scheme continued upto 31.03.1993. From 01.06.1993, the Government restarted paying interim relief in the second phase to certain categories of persons excluding payees of income tax, sales tax, property tax, Government servants and employees of Public sector undertakings. This will continue upto 31.5.1997.

Meanwhile, on the directions of the Supreme Court, a separate scheme for payment of interim relief to the left over residents (additional one lakh category) of these wards was started from 1.3.1992 for a period of 3 years. It has been decided to extend this scheme further beyond 28.2.1995 on the same lines as for the beneficiaries of the Second Phase scheme.

6. Settlement of Compensation claims

The office of the Welfare Commissioner has been set up by the Government of India under the Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985 and the scheme framed thereunder. The adjudication of claims for payment of compensation to the victims was started by the Welfare Commissioner in February, 1992 in compliance of the Supreme Court Order dated 3.10.1991. The process of disbursement of compensation could start after October, 1992 when the funds for disbursement were transferred by the Supreme Court to the Commissioner for the Welfare of Bhopal gas victims.

The process of adjudicaion of the claims was slow in the initial stages as considerable time was required for setting up the Claim Courts. Out of about 6 lakh compensation claims filed by the victims, about 3.04 lakh claims (including more than 14,700 death claims) have been adjudicated upto 31-3-1996.

A sitting judge of the High Court of Madhya Pradesh has been appointed as Welfare Commissioner. Under him, 56 courts of Deputy Commissioners with the supporting staff have been sanctioned. 11 courts of Additional Commissioners with the supporting staff have also been sanctioned to hear appeals from the courts of the Deputy Commissioners. Lok Adalats are also being organised by the Welfare Commissioner for speeding up the adjudication of compensation claims.

7. Medical studies

The Indian Council of Medical Research (ICMR) and other organisations have carried out various studies on the effects of MIC on the gas affected population of Bhopal. The Central Government has set up a revolving fund of Rs. 5 crores under the State Government so that funding of medical studies could be continued from the interest earned by this corpus fund.

8. Hospital at Bhopal

As per the directions of the Supreme Court, a specialised hospital is to be constructed and set up at Bhopal for the gas victims. The hospital is required to be completed within a period of three years from the date of the Supreme Court order of 14.12.1994. A total amount of Rs. 117 crores is available for the construction, equipping and maintenance of the facilities for a period of 8 years after its completion.

The design of the hospital would be modular in nature so that in case additional funds are made available, the hospital facilities could be expanded. As of now, the hospital will have 260 beds with the following medical facilities :

(a) Respiratory diseases with diagnostic laboratory and respiratory intensive care unit.

(b) Diagnostic cardiology laboratory and intensive care unit.

(c) Neuro-sciences including Neurology, Neurosurgery and psychiatry.

(d) Gastro-entrology, medical and surgical.

(e) Opthalmology.

The construction work at the site has commenced in September, 1995. The entire project work is likely to be completed by December, 1997.

The Supreme Court has ordered release of Rs. 187 crores and interest accrued thereon from the attached amount for providing following addl. medical structure to the 260 bed hospital.

1. A 30-bed Cardio Thoracic Surgery Department at an estimated cost of Rs. 61.7 crores.

2. Setting up of a Research-cum-teaching unit at an estimated cost of Rs. 20.4 crores and

3. Setting up of upto 10 mini units at an estimated cost of Rs. 105 crores.

PUBLIC SECTOR PERFORMANCE

A. DRUGS AND PHARMACEUTICALS UNDERTAKINGS AND OTHER ORGANISATIONS

There are five Central Public Sector Undertakings and six Joint Sector Undertakings in the Pharmaceutical Industry Sector under the administrative control of the Department of Chemicals & Petrochemicals. In addition, there are two wholly owned subsidiaries and a registered Society. The brief profile of these organisations is given in the subsequent paragraphs.

1. INDIAN DRUGS & PHARMACEUTICALS LIMITED (IDPL)

Indian Drugs & Pharmaceuticals Limited (IDPL) was incorporated on the 5th April, 1961 with the primary objective of creating self-sufficiency in essential/life saving drugs and medicines. The company has presently three manufacturing plants: one each at Rishikesh in Uttar Pradesh, Hyderabad in Andhra Pradesh and Gurgaon in Haryana. IDPL has two wholly owned subsidiaries, namely, IDPL (Tamil Nadu) Ltd., Madras in Tamil Nadu and Bihar Drugs & Organic Chemicals Ltd. at Muzaffarpur in Bihar. In addition, IDPL has three joint sector undertakings, promoted in collaboration with the respective State Govenments. These are, Rajasthan Drugs & Phar maceuticals Limited (RDPL), Jaipur; Uttar Pradesh Drugs & Pharmaceuticals Limited (UPDPL), Lucknow; and Orissa Drugs and Chemicals Ltd. (ODCL), Bhubaneshwar.

IDPL manufactures life saving drugs and formulations. The main products are Bulk Drugs—Penicillin-G, Tetracycline, Oxytetracycline, Steptomycin, Vitamins—B1, B2, B6 and Folic Acid and Chloroquin Phosphate. IDPL also manufactures antimalarials, anti-filarials, anti-TB, anti-leprosy formulations. The infrastructure created at IDPL had acted as a catalyst for the development of the indigenous pharmaceutical industry.

IDPL was formally declared sick by the Board for Industrial and Financial Reconstruction (BIFR) on the 12th August, 1992. After sustained efforts, a revival package for the company was formulated and the package was approved by the BIFR on the 10th February, 1994. The revival period is 10 years beginning from 1994-95. The BIFR after review of the performances of the company in 1994-95 and also upto September, 1995, appointed Industrial Development Bank of India (IDBI), Bombay, as the operating agency to make a techno-economic viability study of IDPL and to suggest measures for its rehabilitation. The operating agency is expected to submit its report by the 30th April, 1996.

2. HINDUSTAN ANTIBIOTICS LIMITED (HAL)

Hindustan Antibiotics Ltd. (HAL), Pimpri, Pune was incorporated on 30th March, 1954. This was the first public sector company in drugs and pharmaceuticals. HAL has its plant located at Pimpri, Pune. There are three joint sector units promoted by HAL in collaboration with the respective State Governments. These are, Karnataka Antibiotics & Pharmaceuticals Limited (KAPL), Bangalore in Karnataka, Maharashtra Antibiotics & Pharmaceuticals Limited (MAPL) at Nagpur in Maharashtra and Manipur State Drugs & Pharmaceuticals Limited (MSDPL) at Imphal in Manipur. The main products of HAL are bulk drug Penicillin-G, various salts of Penicillin and Streptomycin. The company produces a wide range of pharmaceutical formulations including agrovet products.

3. BENGAL CHEMICALS & PHARMACEUTICALS LIMITED (BCPL)

This was a sick company in the private sector in the name and style of Bengal Chemicals & Pharmaceutical Works. The management of the company was taken-over by the Central Government with effect from the 15th December, 1977. It was nationalised from the 15th December, 1980. A new public sector company in the name and style of Bengal Chemicals & Pharmaceuticals Limited (BCPL) was incorporated on the 17th March, 1981.

The company has four manufacturing units; one each at Maniktala and Panihati at Calcutta (West Bengal); one at Bombay (Maharashtra) and the fourth one at Kanpur (Uttar Pradesh). The company manufactures and markets a wide range of industrial chemicals like Sulphuric Acid, Ferric Alum; a large number of drugs and pharmaceuticals besides Cosmetics and Home products. In the home products, the well-known products are Cantharidine Hair Oil and Lamp Brand Phenol.

The company was formally declared sick by the Board for Industrial and Financial Reconstruction

5—762 M/o C & F/95

(BIFR) on the 14th January, 1993. A revival package, on the basis of the report of Industrial Reconstruction Bank of India (IRBI), Calcutta, an Operating Agency appointed by the BIFR, and the support extended by the Government of India, was approved by the BIFR on the 4th April, 1995. The revival period is 10 years beginning from 1994-95.

4. BENGAL IMMUNITY LIMITED (BIL)

This was a sick company in the private sector in the name and style of Bengal Immunity Company Ltd. The management of the company was taken-over by the Central Government with effect from the 18th May, 1978. It was nationalised from the 1st October, 1984. A new public sector company in the name and style of Bengal Immunity Limited (BIL) was incorporated on the 1st October, 1984.

The company has two manufacturing units; one each at Baranagar at Calcutta (West Bengal) and at Dehradun (Uttar Pradesh). The main products of the company are Sera, Vaccines and Toxoids with its own know-how and indigenous raw materials.

The company was formally declared sick by the Board for Industrial and Financial Reconstruction (BIFR) on the 9th March, 1993. The BIFR, on the basis of the report of the Industrial Reconstruction Bank of India (IRBI), Calcutta, the Operating Agency appointed by the BIFR, and the support extended by the Government of India, approved a revival package for this sick company on the 3rd January, 1995. The revival period is 10 years beginning from 1994-95.

5. SMITH STANISTREET PHARMACEUTICALS LIMITED (SSPL)

It was a sick company in the private sector in the name and style of Smith Stanistreet Company Ltd. The management of the company was taken-over by the Central Government with effect from the 4th May, 1972. It was nationalised on 1st October, 1977 and a new public sector company in the name and style of Smith Stanistreet Pharmaceuticals Ltd. (SSPL) was incorporated on the 19th July, 1978.

The company has its manufacturing and the registered office at 18, Convent Road, Calcutta (West Bengal). SSPL manufactures pharmaceutical formulations, namely, Tablets, Capsules, Parenterals, Liquid Orals etc. It has a hired facility at Bangalore to produce one of its formulations, namely, Aminovin Tonic.

The company was formally declared sick by the BIFR on the 21st December, 1992. The BIFR, on the basis of the report of the IRBI, Calcutta, the Operating Agency appointed by it and the support extended by the Government of India, approved a revival package on the 31st August, 1994. The revival package is for 10 years beginning from 1994-95.

JOINT SECTOR UNDERTAKINGS

1. RAJASTHAN DRUGS & PHARMACEUTICALS LIMITED (RDPL)

This is a joint sector undertaking promoted by Indian Drugs & Pharmaceuticals Ltd. (IDPL) and the Rajasthan Industial Investment Corporation (RIICO). IDPL holds 51% of the equity shares and the rest is with RIICO. The company was incorporated in 1978 and the commercial production was commissioned in April, 1981. The company has its manufacturing unit and the registered office located at VKI Industrial Area, Jaipur (Rajasthan). This is a formulation unit engaged in the production of Tablets, Capsules, Liquid Orals and Injectables etc.

2. UTTAR PRADESH DRUGS & PHARMACEUTICALS LTD. (UPDPL)

This is a joint sector undertaking promoted by IDPL and the Pradeshiya Industrial Investment Corporation of Uttar Pradesh (PICUP). IDPL holds 51% of the equity shares and the rest is with PICUP. This company was incorporated in 1978 and the commercial production was established in October, 1979. The company has its manufacturing unit and the registered office located at Lucknow (Uttar Pradesh). The main products and pharmaceutical formulations are in the form of Tablets, Capsules, Powders, Liquid Orals and Injectables.

The Board for Indusrial and Financial Reconstruction (BIFR) formally declared the company as sick on the 30th December, 1992. After prolonged and sustained efforts, a revival package for the company has been sanctioned by the BIFR on the 22nd August, 1995. The revival period is 10 years beginning from 1995-96.

3. ORISSA DRUGS & CHEMICALS LIMITED (ODCL)

This is a joint sector undertaking promoted by IDPL and the Industrial Promotion and Investment Corporation of Orissa Ltd. (IPICOL). IDPL holds 51% of the equity shares and the rest is with IPICOL. The company was incorporated in 1979 and commissioned fully for production from September, 1983. The company has its manufacturing unit and its registered

office in Mancheshwar Industrial Area. Bhubaneshwar in the State of Orissa. The company is engaged in the manufacture of Pharmaceutical formulations in the form of Tablets. capsules. powder. ointments etc.

ODCL was formally declared sick by the Board for Industrial and Financial Reconstruction (BIFR) on the 26th October. 1992. On the basis of the report of the Operating Agency. appointed by the BIFR. and the support extended by the promotors (Govt. of India). the BIFR approved a revival package for ODCL on the 18th August. 1994. The revival operations have begun from the year 1994-95.

4. KARNATAKA ANTIBIOTICS & PHARMACEUTICALS LTD. (KAPL)

This is a joint sector undertaking promoted by Hindustan Antibiotics Ltd. (HAL) in collaboration with Karnataka State Industrial and Investment Development Corporation (KSIIDC). HAL holds 51% of the equity shares and the rest is with KSIIDC. The company was incorporated on the 13th March. 1981 and the commercial production established from August. 1984. The manufacturing unit and the registered office of the company is located at Bangalore (Karnataka). The main products are pharmaceuticals formulations like Tablets. Capsules. injectables etc. KAPL has. from the very first year of its operations. been earning profits.

5. MAHARASHTRA ANTIBIOTICS & PHARMACEUTICALS LTD. (MAPL)

This is a joint sector undertaking promoted by Hindustan Antibiotics Ltd. (HAL) and in collaboration with the State Industrial and Investment Corporation of Maharashtra (SICOM). HAL holds 51% of the equity shares and the rest is with SICOM. The company was incorporated in November. 1979 and the commercial production established in May. 1981. The registered office and the factory of the company is located at Nagpur (Maharashtra). This is also a pharmaceutical formulation unit manufacturing Tablets. Capsules. Liquid Orals. Ointments. Injectables etc.

6. MANIPUR STATE DRUGS & PHARMACEUTICALS LIMITED (MSDPL)

This is a joint sector undertaking promoted by Hindustan Antibiotics Ltd. (HAL) and in collaboration with Manipur Industrial Development Corporation (MANIDCO). HAL holds 51% of the equity shares and the rest is with MANIDCO. The company was incorporated on the 18th July. 1989. The project. with an estimated original outlay of Rs. 2.50 crores. is yet to be fully commissioned. A part of the production facilities has been commissioned. The manufacturing unit and the registered office is at Imphal (Manipur).

WHOLLY OWNED SUBSIDIARIES

1. IDPL (TAMIL NADU). LTD., MADRAS

In terms of the approved revival package, the Surgical and Formulation Unit of IDPL at Madras has been converted into a wholly owned subsidiary in the name and style of IDPL (Tamil Nadu). Madras with effect from the 1st April. 1994. IDPL holds the entire equity. capital of this unit. The past long-term liabilities amounting to Rs. 59 crores as on 31.3.1994 have been taken-over by IDPL.

2. BIHAR DRUGS & ORGANIC CHEMICALS LTD., MUZAFFARPUR

In terms of the revival package approved by the Board for Industrial & Financial Reconstruction (BIFR). the organic chemicals and drug manufacturing unit of IDPL at Muzaffarpur (Bihar) has been converted into a wholly owned subsidiary in the name and style of Bihar Drugs & Organic Chemicals Ltd.. Muzaffarpur with effect from the 1st April. 1994. IDPL holds the entire equity capital of this unit. The past long-term liabilities amounting to Rs. 36 crores as on 31.3.1994 have been taken over by IDPL.

OTHER ORGANISATIONS

NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCAION AND RESEARCH (NIPER). CHANDIGARH

The Govt. of India have set up the National Institute of Pharmaceutical Education & Research (NIPER) with a total outlay of Rs. 25 crores. It is situated at Sector 67. SAS Nagar. Mohali. near Chandigarh. 130 acres of land for the project has been provided free of cost by the Govt. of Punjab. The turnkey contract for construction of the Institute was awarded to the National Buildings Construction Committee (NBCC). The first phase of construction is nearly complete and the construction of laboratories. teaching blocks. hostels. library. Secretariat Block. faculty house and some of the residential houses has been completed. Internal and external services are being laid out. A Scientist who has vast experience of directing pharmaceutical research in the private sector. has been appointed as the Director and a core staff of 8 Professors/Associate Professors Assistant Professor has been recruited.

The setting up of NIPER fulfils a demand of several decades by the Indian Pharmaceutical Industry and profession. It will be the first national level Institute in India in the pharmaceutical sciences and a proposal to have it declared as an Institute of national importance like IITs. is under consideration of the Government.

NIPER is conceived as a mother institution which with its multi-disciplinary approach would set standards for pharmaceutical colleges and for research and development in the field of pharmaceuticals. It is expected that this Institute through its students, its faculty, and its research will assist the pharmaceutical sector to make a confident entry into the new era of global competition.

The performance of the Five Central Public Sector Undertakings and Six Joint Sector Undertakings in the year 1994-95, on broad parameters, has been as under :

(Rs./Crores)

NAME OF PSU	PERFORMANCE IN 1994-95			PERFORMANCE IN 1993-94		
	Production	Sales	Net Profit/ (Loss)	Production	Sales	Net Profit/ (Loss)
IDPL	199.23	183.03	(77.52)	165.02	157.72	(69.64)
HAL	183.31	197.82	(22.30)	206.73	199.37	(12.68)
BCPL	22.51	19.28	(6.38)	18.00	15.84	(10.98)
BIL	15.32	13.52	(5.69)	15.43	14.96	(9.50)
SSPL	1.79	1.78	(4.99)	3.47	6.17	(6.99)
Joint Sector Undertakings						
RDPL	8.44	8.94	0.35	5.48	7.17	0.03
UPDPL	1.43	1.28	(2.63)	2.44	2.43	(2.47)
ODCL	1.34	1.27	(0.31)	1.17	2.19	(0.66)
KAPL	43.46	35.55	2.50	38.28	32.28	1.91
MAPL	13.03	14.21	0.23	12.79	12.33	0.20
MSDPL	0.32	0.45	0.06	0.15	0.05	—

PERFORMANCE IN 1995-96 (APRIL-MARCH 96)

The Company-wise performance of the five Central public sector undertakings in 1995-96 (April to March 96) has been as under :

(Rs./Crores)

NAME OF PSU	1995-96 (Provisional)			1994-95		
	Production	Sales	Net Profit/ (Loss)	Production	Sales	Net Profit/ (Loss)
IDPL	113.58	122.56	(105.51)	199.23	183.03	(77.52)
HAL	168.00	158.87	(13.58)	183.31	197.82	(22.30)
BCPL	29.25	26.64	(6.38)	22.51	19.28	(6.38)
BIL	21.30	19.03	(4.10)	15.32	13.52	(5.69)
SSPL	7.15	5.70	(3.31)	1.79	1.78	(4.99)

HIGHLIGHTS OF PERFORMANCE IN 1994-95

1. **IDPL**—The expansion of capacity of Penicillin-G from 400 MMU to 600 MMU was completed and further expansion upto 800 MMU is nearing completion. The company could achieve the manpower rationalisation by 2059 persons as against the target of 3300 persons. In the wake of the out-break of Plague in Gujarat in September, 1994, IDPL played the key role in supplying adequate quantities of Tetracycline formulations to the State authorities and also through the normal trade channel. Like-wise, IDPL played a vital role in the combat of Malaria which broke out in the Northern States and in the State of Rajasthan. The formulation product-mix has been rationalised. The two plants at Madras and Muzaffarpur have been converted into wholly owned subsidiaries with effect from the 1st April, 1994 in accordance with the approved revival package. The company has been able to obtain the title of land at Hyderabad and Gurgaon from the respective State Governments.

2. **HAL**—The main strength of HAL is in the production of Penicillin-G First Crystal bulk drug. It is one of the leader producers. HAL has, over the years, been taking steps for upgradation of the Penicillin-G technology and the existing Pen.G Plant. The company has been looking for a world class technology for the upgradation of the plant. HAL has been successful recently in entering into a tie-up with MAX-GB Ltd. for upgradation of the existing Penicillin-G plant with the technoloy of the Royal Gist-Brocades of the Netherlands. The collaboration is on the basis of a Joint Venture on 50 : 50 shareholding basis in the existing Pen.G plant of HAL. The main plan, of the technological upgradation through this collaborative joint venture is enhancing the production capacity and reduction in the cost of production. The capacity is likely to increase to 1800 MMU over a period of three years and a cost reduction to the extent of 40% is envisaged.

The financial strength of HAL, the competitiveness and its ability to withstand the competition emerging in the pharmaceutical market is expected to be on a sound footing with the joint venture operations taking shape in the near future.

HAL introduced few new products, namely, Rhinax, an Ayurvedic Tonic and Haloran, a formulation of Diclofenac Sodium. The company developed three new formulations, namely, a combination of Ampicillin and Cloxacillin in capsule form; Omeprazole and Atenolol Tablets.

3. **BCPL**—In the year 1994-95, the first year of revival operations, the company achieved a production of Rs. 22.51 crores registering a growth of 25% over that of Rs. 18.00 crores of 1993-94. The sales turn-over at Rs. 19.28 crores also registered a growth of about 25% over Rs. 15.84 crores of 1993-94. The revival plan was formally sanctioned on the 4th April, 1995, yet the company could gear up the operations in 1994-95 and achieve significant growth both in production and sales.

BCPL had been a leader in the market in Cantharidine Hair Oil and for its Lamp Brand Phenol. Being primarily consumer products, the competition in the market gradually eroded the position of BCPL as leader. To provide a phillip to the sales of these two premier products, BCPL launched a compaign through the audio-visual media. The compaign has helped the company in arresting the degrowth in sales of these two premier products and the company has been able to increase its market share. In the year 1995-96, the value of production of BCPL was Rs. 29.24 crores, registering a growth of 30% over that of 1994-95. The sales at Rs. 26.64 crores, registered a growth of 31% over that of 1994-95. The cash loss incurred by the Co. was Rs. 0.75 crores as against Rs. 2.71 crores, of 1994-95. The performance of BCPL has been encouraging.

4. **BIL**—In the year 1994-95, the first year of operations of the revival plan, the company achieved a production of Rs. 15.32 crores and a sales turn-over of Rs. 13.52 crores. Although the performance was below the target, yet the net loss at Rs. 5.69 crores came down significantly as compared to Rs. 9.50 crores of 1993-94. In the year 1995-96, the value of production at Rs. 21.45 crores, registered a growth of 40% over that of 1994-95. In sales the turnover was Rs. 19 crores, registering a growth of about 35% over that of 1994-95. The estimated cash loss in 1995-96 was Rs. 3.10 crores as against Rs. 5.57 crores of 1994-95. The overall performance of the company is encouraging, operations have been geared up and the effect of the revival operations would be visible from 1996-97.

5. **SSPL**—The operations of the company could not be geared up in 1994-95 for a variety of reasons including lack of managerial inputs. As against the target of production of Rs. 16.65 crores, the actual production was Rs. 1.79 crores. Similarly, the sales in 1994-95 were of the value of Rs. 1.78 crores as against the target of Rs. 15.00 crores. The company incurred a net loss of about Rs. 4.38 crores. The company has incurred a cash loss of Rs. 4.25 crores as against the targetted cash loss of Rs. 1.46 crores.

The short-fall in the performance of the company in 1994-95 are attributed to :

(i) Weak marketing set-up;

(ii) Loss of market on account of inadequate supplies;

(iii) erosion of the working capital and inadequate cycling of the working capital;

(iv) loss of creditability from suppliers; and

(v) inadequate managerial inputs.

6—762 M/o C & F/95

There had been a virtual exodus of senior level personnel from the company in 1994-95. Although the revival scheme of the company was sanctioned by the BIFR, the company could not attract any talent from outside. The post of General Manager (Marketing), General Manager/Chief Manager (Production), Chief Manager (Finance) and four posts of Regional Manager (Marketing) fell vacant. In the absence of senior level personnel, the company lacked in the requisite managerial inputs and leadership needed to upgrade the operations.

The current charge of the post of Managing Director, SSPL was entrusted to the Managing Director, Bengal Chemicals & Pharmaceuticals Ltd. (BCPL). The Board of Directors was strengthened by induction of Managing Directors of both BCPL and BIL. The Board also has part-time Directors nominated by the BIFR besides the Special Director appointed by the BIFR. The full-time Managing Director has been selected and appointed with effect from the 11th October, 1995. The post of General Manager (Marketing) has also, after prolonged efforts, been filled up in November, 1995. Efforts to bring suitable officers on deputation from other undertakings are being made. In the year 1994-95, the Government released a total sum of Rs. 4.32 crores including a non-plan working capital support of Rs. 3.82 crores and a Grant-in-Aid of Rs. 0.50 crores.

In the year 1995-96, measures taken to gear up the operations brought about considerable improvement in the performance of the company. The value of production in 1995-96 was Rs. 7.23 crores as against Rs. 1.79 crores of 1994-95. The sales were of the value of Rs. 5.74 crores as against Rs. 1.76 crores of 1994-95. The estimated cash/net losses in 1995-96 were Rs. 3.16 crores and Rs. 3.31 crores respectively as compared to Rs. 4.25 crores and Rs. 4.40 crores respectively of 1994-95. Further measures far gearing the operations of the company are under consideration.

B. PETROCHEMICALS UNDERTAKINGS

1. INDIAN PETROCHEMICALS CORPORATION LIMITED

Indian Petrochemicals Corporation Limited (IPCL) is a MOU signing public sector undertaking incorporated in March, 1969. The authorised capital of the Company is Rs. 400 crores and paid-up capital Rs. 248.83 crores. IPCL's shares were partially disinvested by the Government in 1991-92. IPCL brought a public issue of its equity in November, 1992 followed by issue of partly convertible debentures in March, 1994 on rights basis. In December, 1994, IPCL became the first public sector, which issued Global Depository Receipts (GDRs) for a value of US $ 85 million. The Govt. of India's holding in the Company is 59.48% of paid-up capital.

2. Initially, the facilities of IPCL were set up near Baroda (Vadodara) in Gujarat and the Company was entrusted with the responsibility of production and distribution of various petrochemicals like polymers, synthetics organic chemicals, plastics, fibre and fibre intermediates. Besides production of the above items, the Company concentrated its attention on developing markets for these products for the period 1973 to 1984.

3. In order to keep pace with the demand created, IPCL set up a new Gas Cracker Complex at Nagothane, in Raigarh district of Maharashtra at an estimated cost of Rs. 1635 crores. The Nagothane Plant has an ethylene capacity of 3 lakhs TPA with down-stream products such as LDPE, LLDPE/HDPE, Polypropylene, Ethylene Oxide, Mono Ethylene Glycol, Wire & Cable Compound and Butane I. The Plant has become fully operational and it has achieved 91% capacity utilisation during the year 1995-96.

4. IPCL has taken up implementation of another three lakhs TPA ethylene capacity Gas Cracker Complex at Gandhar in Bharuch district of Gujarat at an estimated cost of about Rs. 3500 crores. The project has covered substantial grounds as the technology for cracker and the downstream products has been tied up and detailed engineering is in progress. Manufacturing facilities for VCM, PVC, Chlor-Alkali and integrated utilities, Captive power plant and infrastructure are in advanced stage of creation and these plants are expected to be mechanically completed by mid 1996. Manufacturing facilities for rest of the products viz. ethylene, HDPE, MEG & EO alongwith 35 Kms pipeline and C2/C3 recovery plant will be taken up shortly which are scheduled to be completed by the third quarter of 1998.

5. IPCL's equal equity Joint venture project with GE Plastics, BV, the Netherlands, namely 'GE Plastics India Limited' has started operation and during the year 1994-95, it successfully produced all the three major engineering plastics—LEXAN, NORYL & WALOX in over 100 different grades and colours. These Products meet market demand with products' quality and manufacturing measurements meeting the global standards. The Applications Development Centre at Gurgaon near Delhi is also fully operational with processing, testing prototyping and CAED facilities providing technical support to the industry. Indian Vaccines Corpn. Ltd., (IVCOL), promoted by IPCL, Government of India, and PMSV, France; was facing certain difficulties and after the PMSV refused to offer the technology for the manufacture of vacine, it has been decided to windup IVCOL and the cost of winding up will be shared by the three partners equally. For the Gujarat Chemicals Port Terminal Co. Ltd., financial Institutions such as ICICI, SCICI and Bank of Baroda have committed

the requisite financial support. Matters regarding organisational structure and acquisition of land have been taken up with the Government of Gujarat.

6. The Petrochemicals Management Development Instt. (PMDI) set up by IPCL for providing specialised training and upgradation of knowledge through collaborative approach conducted various in house as well as external training programmes. wherein 4620 employees were exposed. The aspect of the quality management was identified and orientation programmes were conducted to build awareness about IOS-9000.

7. IPCL continued to maintain focus on R&D and made significant contribution to the overall productivity of the Company. The operations at catalysts and adsorbents Division (CATAD) at Thane continued to be encouraging and profitable during 1995-96.

8. The Company continued its policy of providing assistance to its employees for construction of their own houses and a Voluntary Housing Scheme for constructing 375 houses is in the advance stage of completion. A Self-financing Superannuation Fund Scheme is also being finalised to provide pension to the retiring employees. The Company enjoys overall harmonious industrial relations.

9. IPCL has earned profits rights from its inception. During 1995-96. Company's gross turnover was Rs. 3854 crores with gross profit of Rs. 1225 crores and net profit of Rs. 590 crores. The Company's exports during the year were of the order of Rs. 115 crores. The Company paid an interim dividend of 15% during 1995-96 on its paid-up capital. Figures for 1995-96 are provisional.

2. PETROFILS COOPERATIVE LIMITED

Petrofils Cooperative Limited (PCL) is a joint venture of the Government of India and Weavers' Cooperatives spread throughout the country. The Govenment had established this Cooperative Society with the Principal objective of providing polyester filament yarn to weavers in the cooperative sector. The Society is continuing its efforts for the development of polyester weaving in the decentralised weaving sector covering both powerlooms and handlooms so as to afford weavers an opportunity to earn better wages and higher profits thereby improving their economic conditions.

As on 31.3.1996 the Society had 1443 cooperatives as Members of the Society. The Society produces Polyester Filament Yarn. Nylon Filament Yarn and Spandex Yarn in its 4 plants located at Vadodara and Naldhari in Gujarat. The Society produced 18568 MT of Yarn in 1995-96 as against 17409 MT in 1994-95. The sales turn over of the Society was Rs. 351.66 crores in 1995-96 as compared to Rs. 329.57 crores in 1994-95. PCL has estimated a net loss of Rs. 58.19 crores in 1995-96 as against a net loss of Rs. 10.11 crores in 1994-95. Figures for 1995-96 are provisional.

The year 1995-96 was a very difficult year for the society. The erratic availability of raw materials both from domestic as well as international sources coupled with unprecedented price hike of more than 50% due to global shortages adversely affected the working of the Society.

A grass-root Polyester Filament Yarn plant with an investment of Rs. 146.45 crores. having capacity to produce 60 Metric Tonne of Polyester Chips per day and 8000 MTA Polyester Filament Yarn has been set up at Naldhari in the Bharuch District of Gujarat. The spinning lines of the plant had become operational since August 1992. However. the polycondensation plant was commissioned in July 1994. In addition. the Society has also set up a 300 MTA Spandex Yarn plant costing Rs. 75 crores at the same location. The plant was mechanically completed in January 1994 and the commissioning of the entire plant was started in March 1994 for trial production of various types of Spandex Yarn. After executing certain modifications the plant operations would be stabilised to achieve sustained commercial production in the current year. Another project costing Rs. 44.50 crores for increasing the production of Polyester Filament Yarn by 4000 MTA at Vadodara was approved by EFC in May 1994. The project will be implemented soon after finalisation of revised financial arrangements.

3. CENTRAL INSTITUTE OF PLASTIC ENGINEERIG AND TECHNOLOGY (CIPET)

Central Institute of Plastic Engineering and Technology (CIPET) was established in 1968 at Madras with the primary objectives to develop trained manpower and provide technical services to plastics and its allied industries. Presently there are eight extension centres of CIPET at Ahmedabad. Lucknow. Hyderabad. Bhopal. Bhubaneshwar. Imphal. Amritsar and Mysore besides the headquarters centre at Madras with thrust areas as processing and machinery development. teletronics and automobiles. Engineering Plastics. Plastics in Agriculture. Packaging and Housing. Water Management and household applian ces. plastic as substitute for conventional material. plastics in precision engineering. and evaluation and quality control. A service centre of CIPET at Goa has been set up in December. 1993 to provide requisite support to plastic industries in and around Goa.

The Govt. of India has approved a new CIPET Service Centre at Patna, Bihar in May 94 and subsequently it was approved for upgradation as Training Centre with financial assistance from IPCL. Government of India has also approved setting up of an extension centre of CIPET in West Bengal at an estimated capital cost of Rs. 9.20 crores which will be shared by the Central Govt. and the State Govt. of West Bengal in equal proportion.

1371 students were trained by the Institute in several long term courses in 1994-95 as against 1274 students in 1993-94. In addition, 80 short term courses were conducted in 1994-95 involving 1308 students as against 89 cources involving 1123 students in 1993-94. During 1995-96, the students to be enrolled for long term courses has been proposed to be 1410. The Institute also conducted various tailor-made programmes for the industry besides undertaking a number of developmental projects and awareness programmes.

Under the Montreal Protocol, a project has been sanctioned to the Department of Chemicals & Petrochemicals to be executed by CIPET for preparation of foam sector strategy so as to replace the existing CFC technology with CFC free technology. UNDP is providing funds for this project. The CFC is one of the chemicals which are instrumental of depletion of ozone layer and India being a signatory to Montreal Protocol, has to plan for phasing out the CFC technology within a specified time period.

Modernisation of CIPET facilities through World Bank assistance is under implemention. Procurement of Testing equipments through ICB 9, 10 & 11 is almost complete. All the equipments have been supplied, installed and commissioned. Procurement of processing machineries under ICB 4 to 8 is underway. Equipment/Study tour and Fellowship training abroad is going on simultaneously.

C. CHEMICALS AND PESTICIDES UNDERTAKINGS

1. HINDUSTAN ORGANIC CHEMICALS LIMITED

Hindustan Organic Chemicals Ltd. (HOCL) was incorporated on 12th December, 1960 for setting up manufacturing capacities for chemicals/intermediates which are required for production of Dyes, Dye-Intermediates, Rubber Chemicals, Pesticides, Drugs and Pharmaceuticals, Laminates, etc. It was expected that indigenous manufacture of these chemical intermediates will give impetus to downstream industry in a big way resulting in setting up of chemicalunits and achieving self-sufficiency for the country in this area. This objective of setting up HOC has been fully achieved since at present more than 500 units based on HOC's products have been set up all over the country which have not only achieved self sufficiency but have entered into international market, earning precious foreign exchange by exporting chemicals, dyes & drugs over a number of years.

The production range of HOC includes Phenol, Acetone, Aniline, Nitrobenzene, Nitrotoluenes, Chlorobenzenes and Nitrochlorobenzenes. The raw materials used by HOC are Benzene, Toluene, LPG Methanol, Naphtha and Sulphur, majority of which come from Petroleum Refineries.

HOC has two units, one at Rasayani (Maharashtra) and other at Cochin (Kerala). It has also formed a subsidiary company at Rudraram (AP) for manufacture of Poly-tetra-fluro-ethylene (PTFE), a high tech. engineering plastic.

HOC has achieved more than 90% capacity utilisation and made substantial profits and declared dividend for the last 20 years continuously. With the equity capital of Rs. 67.37 crores, it has built reserves and surplus of Rs. 326.21 crores as on 31-3-96. It has not only absorbed but also improved technologies purchased from abroad and set up additinal capacities based on in house development of R&D and technology. The achievements in the areas of Pollution Control, recovery of wealth from waste, export performance, presentation of annual reports, safety and energy conservation have earned awards and accolades from prestigious institutions and Government Agencies.

The company has ambitious expansion/diversifications plans for implementation during the eighth plan period (1992—97) which include, apart from the expansion of certain existing capacities (i) Caustic Soda/Chlorine (ii) MDI/TDI (iii) Hydrogen Peroxide (iv) Polyurethane Systems etc. at an investment of about Rs. 550 crores.

HOC employs 2357 people directly and provides indirect employment to 23570 and also employment to 47140 people in down steam sector.

The company has plans to take up a number of project in the near future. For financing these projects and the new schemes, the company launched a Public Issue of equity of the value of Rs. 97 crores in November, 1994 which was an astounding success with over-subscription of 13 times. For the year 1994-95, the company declared a dividend of 16% and accordingly Rs. 6.31 Crs. was given to Govt. of India as its share.

Development of Infrastructural Facilities at the port has been identified as one of the thrust areas for investment by HOC. Following this, the Company has already initiated action for setting up (a) storage facilities and (b) port handling facilities at Jawaharlal Nehru Port and the New Mangalore Ports, the initial outlays involved being Rs. 14 crores and Rs. 36 crores respectively.

HOC's PAST PERFORMANCE

	Total Production (MT)	Total Sales (Rs Crores)	Net Profit (Rs. Crores)
1990-91	2.58.626	236.00	45.33
1991-92	2.67.919	299.57	56.65
1992-93	2.73.786	298.36	40.57
1993-94	2.46.490	272.13	21.77
1994-95	2.72.523	314.77	27.90
1995-96 (Prov.)	3.04.406	459.38	60.12

During the year 1995-96. HOC achieved record performance in all the areas of its operations. Profit before tax rose to an all time high record of Rs. 70.12 crores from Rs. 27.66 crores (154% increase) and Net Profit rose to the level of Rs. 60.12 crores (representing 117% increase over previous year). Highest production of 3.04.406 tonnes has been achieved registering an increase of 12% over previous year. So far as sales volume is concerned the increase level of 1.69.503 tonnes has been achieved as against 1.51.737 tonnes (a rise of 12%). Valuewise. highest ever turnover of Rs. 459.38 crores has been achieved as against Rs. 359.20 crores turnover of previous year recording an impressive 28% growth. The earnings Per Share reached the level of Rs. 8.92 as against Rs. 5.31 (68% increase) over last year.

HINDUSTAN INSECTICIDES LTD.

M/s. Hindustan Insecticides Ltd. incorporated in 1954 has at present three units one each at Delhi. Udyogamandal in Kerala and Rasayani in Maharashtra. The company also has a subsidiary company namely the Southern Pesticides Copn. Ltd. with headquarters at Hyderabad and factory at Kovvur in Andhra Pradesh. HIL is engaged in the manufacture of DDT. BHC. Malathion. Endosulfan and Butachlor. five major pesticides used in the country.

HIL commissioned their Monocrotophos Tech. plant with an annual capacity of 300 MT at their Rasayani Unit in Maharashtra. During the year 1995-96. two new plants were commissioned at the Rasayani and Udyogamandal units to produce Carboxin. a seed protectant multipurpose fungicide and Dicofol. a wide spectrum acaricide cum insecticide. both for the first time in the country. The technologies for these products were developed by the company's own in-house R&D centre. The company is also in the process of setting up a new generation eco-friendly fungicide plant at Udyogamandal unit and a multipurpose insecticide plant at Rasayani unit. It is also proposed to expand the Monocrotophos production capacity at Rasayani unit by 50% by incorporating process modifications. HIL supplies the major portion of its formulations to the National Malaria Eradication Programme.

HIL has its Central R&D Complex at Dundehera in Gurgaon District. Haryana State. The Central R&D complex has scientific and technical personnel working in various departments such as synthesis process development. formulations. entomology. residue studies. analytical techniques and pilot plant. At present R&D is developing process technologies for products such as Oxycarboxin. Copper oxychloride Mancozeb and Pendimethalin. Other services rendered by R&D include pilot plant trial attending the trouble shooting in production units.

The performance of the Company is as under :—

(Rs. in lakhs)

	Production (MT/KL)	Sales Turnover	Net Profit before tax.
1990-91	26026	6436	(—)938.70
1991-92	26042	7186	(—)626.22
1992-93	26401	8254	(+) 44.14
1993-94	26000	10901	(+)200.30
1994-95	19177	10393	(+)226.00
1995-96 (Provisional)	24870	13000	(+)600.00

HIL achieved an all time high export of Rs. 21.3 crores as against Rs. 12.6 crores during 1994-95 by exporting its products to many developed countries besides developing countries. The performance of HIL for the year 1995-96 has improved substantially. It's sales turnover has crossed Rs. 130 crores as against Rs. 140 crores during 1994-95. registering an increase of over 25%. The net profit of the company has gone up three fold to Rs. 6.1 crores.

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY (IPFT)

Background

The Institute of Pesticide Formulation Technology at Gurgaon is a non-profit making organisation registered under the Societies Registration Act on May 31. 1991. The objectives of the Institute is to promote advancement of Pesticide Formulation Technology in India. The Institute aims to develop and promote safer. efficient. economic and environment friendly pesticide formulations utilising indigenously available raw materials. The Institute is recognisd by the Department of Scientific and Indisturial Research. Ministry of Science and Technology. Government of India. The Institute has also been given the role of Technical Coordinator Unit of the Regional Network on safe Pesticides Production & Information for Asia and Pacific (RENPAP). a Programme of UNDP/UNIDO on Pesticide Formulation and Quality Control.

2. The Institute has basic research and development laboratories and training facilities in various aspects of formulations like development. manufac ture and quality control. safety and packaging of pesticides.

3. Services rendered to the pesticide industry Pesticide Formulation

One of the major objectives of the Institute is to develop and provide the pesticide formulation

industry with user and environment friendly pesticide formulations so that the Indian farmers could have access to the user friendly products like their counterparts in the developed countries. The universally acceptable safer formulations are Suspension Concentrates (SC). Water Dispersible Granules (WG). Concentrated Emulsion (CE) Micro Emulsion and Controlled Release formulations.

The Laboratory

The Institute is well equipped with most of the facilities required for the development of state-of-art pesticide formulations. The specialized equipments available at the laboratory include Dynomill (KDL special). Eiger Mill. Fluid Bed Spray Granulator Spray Drier. Turbula. Pan and Disc Granulator. Extruder. Micro Pulverisor. Silverson. Mixer. Climatic Chamber. Laser Based Particle Size Analyser. Rheometer. Film Balance Surface and Interfacial Tensio Meters. Viscometers and Research Microscopes.

During the year 1994-95. Pesticide Formulation Laboratory generated an income of Rs. 9.31 lacs through services rendered to the industry and training programmes conducted by it.

4. **Analytical facilities**

The analytical laboratory of the Institute is fully equipped with the state-of-the-ar analytical instruments namely-Gas Chromatograph coupled with Mass Spectrometric Detector (GC-MSD) High Performance Liquid Chromatograph (HPLC). Super Critical Fluid Chromatograph (SFC). High Performance Thin-Layer Chromatograph (HP-TLC) etc.

It has been recognised as an independent test laboratory by the Bureau of Indian Standards (BIS) for analysing/testing of 93 pesticide samples and their formulations.

The Institute is providing pesticide analytical services. method development. method validation and verification of impurity profile of technical pesticides to the pesticide industry and the BIS.

In order to sensitize the chemical industry on the likely impact of CWC the institute provided assistance in conducting mock National Trial Inspections.

An income of Rs. 21 lacs was generated through rendering analytical services to the industry in course of the year.

5. **Bio-Science Laboratory**

The Bio Science Laboratory is fully equipped to undertake evaluation of pesticides and their formulations for bio-efficacy. phytotoxicity. compatibility and insect resistance to insecticides. The biological services have been offered to the pesticide industry in the country for the generation of efficacy data required for registration of pesticides.

6. **Pilot Plant**

The Institute has a fully equipped pilot plant for scaling up of new formulations developed in the formulation laboratory upto semi-commercial level. The facility includes Dynomill. Fluid Energy Mill. Lodige Mixer. Ribbon Blender. Hammer Mill Besides various size redection Mills.

The pilot plant equipment are being utilised for the in-house and conventional work on technology development. The equipments are being used for live demonstrations during the training programmes.

8. **Human Resource**

The Institute has a team of highly qualified. trained and competent scientists and technologists and many of them have been trained in the world famous laboratories as part of expertise building programme under the UNDP/UNIDO assistance. Some of the staff have served as UNIDO consultants in the developing countries.

II. Regional Network on safe Pesticides Production and information for Asia and the Pacific (RENPAP)

It is a network programme funded by the UNDP and executed by the UNIDO in association with FAO/WHO/ESCAP and CIRAD. There are 15 countries of the Asia and the pacific region namely Afghanistan. Bangladesh. China. India. Indonesia. Iran. Malaysia. Mynamar. Nepal. Pakistan. the Phillipines. Rep. of Korea. Sri Lanka. Thailand and Vietnam participating in this programme. The main thrust of this programme is to replace the hazardous pesticide products and technologies with those which are user and environment friendly through mutual sharing of experience among the member countries of the network. The Govt. of India has been providing the secretarial support facilities to the Regional Coordinating Unit through the IPFT and during the year 1995-96 Rs. 5 lacs have been granted for this purpose.

GENERAL

ORGANISATIONAL SET UP OF THE DEPARTMENT

The main activities of the Department in relation to the industries allocated to it (Annexe-I) are overall sectoral planning and the development and control of these industries under the industries (Development and Regulations) Act as well as monitoring of production and distribution. The administrative and managerial control of the Public Sector undertakings engaged in the manufacture of various chemicals, pharmaceuticals and petrochemicals items is also a major function of the Department.

Secretary (Chemicals and Petrochemicals) is in overall charge of the Department of Chemicals and Petrochemicals. The work of the Department is distributed among three Joint Secretaries who look after four Divisions i.e. (i) Administration, (ii) Chemicals, (iii) Petrochemicals and (iv) Drugs and Pharmaceuticals. The work relating to the Drug Prices Liabilities Review Committee has been assigned to one of the Joint Secretaries. In addition, there is a separate cell looking after the work relating to Bhopal Gas Leak Disaster and special laws relating thereto. A Financial Adviser of the rank of Joint Secretary advises the Secretary on financial matters.

Senior officers designated as Dy. Director General and Advisers and a technical support wing render advice on technical matters relating to the industries in the Drugs, Chemicals and Petrochemicals Sectors.

Besides, the Department incorporates the functions of the Development Commissioner (Pharmaceutical Industries) which is responsible for the implementation of Drug (Prices Control) Order and tariff matters relating to the Pharmaceutical industry.

The Department also has eight public sector undertakings besides subsidiaries under its administrative control and four other organisations. These are listed at Annexe-V.

Employment of Scheduled Castes/ Scheduled Tribes/ Physically Handicapped and Blind :

The representation of Scheduled Castes/Scheduled Tribes/Physically handicapped and Blind in the main Secretariat of the Department of Chemicals and Petrochemicals as on 30-9-95 is as under :—

Group	Total No. of posts	Scheduled castes	Scheduled Tribes	Physically Handi-capped	Blind
A	49	8	—	—	—
B	79	11	1	—	—
C	94	20	2	1	1
D	58	27	2	—	—
TOTAL	280	66	5	1	1

The posts of Group 'A' include officers belonging to Central Secretariat Services besides officers on deputation from IAS, Central Services and other Departments/Undertakings. Recruitment to posts in Group 'B' and 'C' is mostly done on the basis of nominations made by the Department of Personnel and Training.

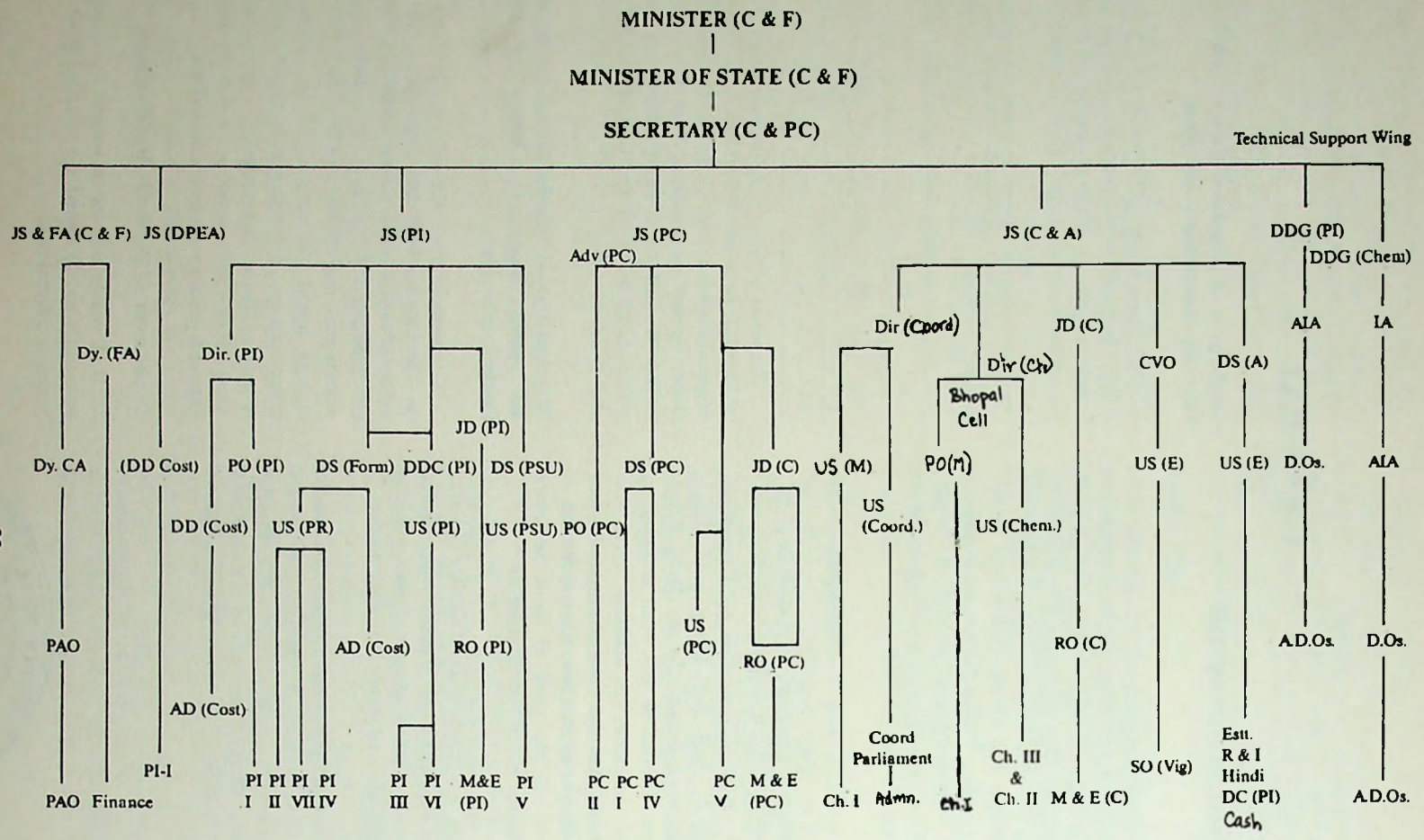
Representation of Scheduled Castes/Scheduled Tribes and other Backward Classes in the Public Sector Undertakings :

Consequent upon the issue of the instructions by the Department of Public Enterprises for the reservation of vacancies for the members of Scheduled Castes, Scheduled Tribes and other Backward Classes, reports are being called from the Public Sector Undertakings under the control of the Department of Chemicals and Petrochemicals about employment of scheduled Castes/Scheduled Tribes and other Backward Classes so as to keep a watch on filling up the reserved posts in these Undertakings.

Employment of Physically Handicapped :

Half yearly reports in respect of employment of physically handicapped are received from the Public Sector Undertakings.

ORGANISATION CHART OF THE DEPARTMENT OF CHEMICALS AND PETROCHEMICALS (AS ON 31-3-96



C — Chemicals
PC — Petrochemicals
PI — Pharmaceutical Industry
B — Bhopal Gas

Organisation and Methods

An Internal Work Study and Organisation and Methods unit is functioning in the Department. The unit is also looking after training both in India and overseas of officials of the Department and Public Sector Undertakings under its administrative control. A number of officers and staff members were sponsored for various training programmes in India and abroad. The inland and foreign training programme covered are as under :—

1. Training Course on Production Management Information System (PROMIS)
2. Training Course on Credit Appraisal for Small and Medium Industries.
3. Seminar on Technology Management.
4. Training Course on Resource Conservation and Environmental Protection.
5. Training Course on ISO 9000 in Hong Kong
6. Certificate Course in Reprography.
7. Management of Training.
8. Advanced Professional Programme in Public Admn.
9. Foreign Training Course for the Year 1996-97.
10. Training Course on—GENDER ISSUES.
11. Management Orientation Programme.
12. Appreciaton Course in Parliamentary Processes and Procedures.
13. Special Programme on Pension and other Retirement benefit.
14. Management Development Programme.
15. Training in Administrative Vigilance.
16. Offer of Training under Colombo-Plan.
17. Orientation Programme for Directors/Deputy Secretary of Central Staffing Scheme.
18. Short term Certificate Course in Servicing and Repair of Records.
19. In-Plant Group Training Programme in Japan.
20. Assistant (Direct Recruits) Foundational Training Programme.
21. Inter-regional Workshop on the Use of Coconut Industries Waste for Energy. in Indonesia.
22. Orientation Course in Parliamentary Procedures and Practices for SOs/Parl. Asstts./ Asstts. in various Ministries/Department.
23. Training Course on "Establishment Rules"
24. SIDA's Advanced International Training Programme "Energy Conservation in Industry 1996" in Sweden.
25. Second Prefessional Develepnent workshop for Principal Private Secretaries.
26. Training course on computer Appreciation for Gazetted officers (Group 'A' & 'B').

Implementation of Official Language

There is a Rajbhasha (Hindi) Section in the Department to implement the various provisions of Official Language Act and Rules. It looks after the progressive use of Hindi in the Deptt. as well as in its Public Sector Undertakings.

Documents pertaining to Section 3(3) of the Official Language Act were issued bilingually. Letters received in Hindi were replied to in Hindi. Efforts were made to promote original noting and drafting in Hindi in official work. Hindi pakhwara (Fortnight) was organised in the Deptt. and competitions on Hindi Essay Writing and Noting and Drafting were arranged.

Official Language implementation committee of the Dept., was reconstituted under the Chairmanship of Joint Secretary (Admn.). Action taken on the decisions taken in the meeting were intensively monitored.

Notification in the Gazette

9 public Sector Units under the administrative control of the Department have been notified in the gazette under Rule 10(4) of the Rules 1976. These are HIL. HOC. IDPL. Regional Office of IDPL at Delhi, Patna and Rishikesh. MAPL. HAL and RDPL.

Quarterly progress reports regarding implementation of Official Language Policy were called for from the PSUs. The PSUs were informed of the shortfalls and were requested to take corrective measures accordingly.

Hindi Teaching Scheme

Staff and Officers of the Department were nominated fo Hindi Training. Action for imparting training to the staff in Hindi Typewriting and Stenography was continued during the year.

Inspection by the Committee of Parliament on Official Language

The first sub-committee of committee of Parliament on Official Langauge visited Regional Office of IPCL at Delhi and Bangalore. Headquarter of HIL. Delhi Office and IDPL. Rishikesh. The committee inspected these Offices and reviewed the progress of use of Hindi.

The measures suggested by the Committee are being complied with by the Deptt. and respective Public Sector Undertakings of the Deptt. Efforts to accelerate the use of Hindi in their Official work were confirmed by the PSUs. Most of the Public Sector Undertakings have set up Official Langauage implementation committees, incorporating the various aspects of the use of Hindi and Annual Assesment report was prepared and sent to the Deptt. of Official Language for review.

The Deptt. have made efforts to achieve the targets fixed in the Annual Programme of Deptt. of Official Language for the Progressive use of Hindi.

OUTSTANDING AUDIT OBJECTIONS AND INSPECTION REPORTS

In pursuance of the recommendation of the Public Accounts Committee in its 169th Report, an adhoc Committee was appointed in the Department to review the outstanding audit objections/ Inspection Reports periodically and take remedial steps to liquidate the backlog audit paras/inspection reports. As on 1st January, 1996 the Department has the following outstanding audit paras appearing in the various Reports of the Comptroller and Auditor General of India and Inspection Reports of Director of Audit and Economic & Service Mnistries :—

No. & Year of the Report	Name of Report	Para No., if any & Brief subject	
No. 8 of 1989	Resume Report	Section—I-5	Bengal Chemicals and Pharmaceuticals Ltd.,— System of Accounts and Book-keeping.
		Section—I-6	System of Accounts and Book-keeping—Bengal Immunity Ltd.
		Section—I-48	Cost Control (H.I.L.)
		Section—I-49	Cost Control (H.O.C.L.)
		Section—I-59	Cost Control (I.D.P.L.)
		Section—I-65	Inventory Control (I.P.C.L.)
		Section—I-114	Internal Control (Rajasthan Drugs & Pharmaceuticals Ltd.)
		Section—I-119	Internal Control (S.S.P.L.)
		Section—I-142	Internal Control (U.P. Drugs and Pharmaceuticals Company Ltd.)
		Section—II-B-12	Inventory Control in Udyogmandal unit (H.I.L.)
		Section—II-B-16	Surplus earned by I.D.P.L. during the period from 1970-71 to 1978-79 amounting to Rs. 2.743.16 lakhs on the trading activity in canalised importer bulk drugs.
No. 4 of 1989	Maharashtra Antibiotics & Pharms. Ltd.		Audi Review—Maharashtra Antibiotics and Pharmaceuticals Limited.,
No. 9 of 1989	Audit observation	Para 26	Forfeiture of deposit due to nonlifting of drugs ordered (S.S.P.L.)
No. 5 of 1990	Resume Report	Section—I-7	Syste of Accounts and Book-keeping (B.C.P.L.)
		Section—I-9	System of Accounts and Book-keeping (B.I.L.)
		Section—I-63	System of Accounts and Book-keeping (Hindustan Insecticides Limited)
		Section—I-65	Cost Control and Inventory Procedure Control (H.O.C.L.)
		Section—I-75	System of Accounts and Book-keeping (I.D.P.L.)
		Section—I-134	System of Accounts and Book-keeping (Orissa Drugs and Chemical Ltd.)
		Section—I-151	System of Accounts and Book-keeping (S.S.P.L.)

No. & Year of the Report	Name of Report	Para No., if any & Brief subject	
		Section—I-166	System of Accounts and Book-keeping (Uttar Pradesh Drugs and Pharmaceuticals Co. Ltd.,)
		Section—II-B-6	Non writing off the plant and machinery—Karnataka Antibiotics and Pharmaceuticals Ltd.,
		Section—II-C-14	Under-provision of depreciation and overvaluation of finished product (H.I.L.)
No. 5 of 1990	Resume Report	Section—II-C-15	Surplus earned by I.D.P.L. during 1970-71 to 1978-79 on the trading activity in canalised imported bulk drugs not deposited with the Govt.
No. 7 of 1990	Audit Observation	Para 2.1	Loss on investment in subsidiary Company—Punjab Maize Products Ltd., (I.D.P.L.)
		Para 2.2	Avoidable expenditure due to delay in reduction of contracted load (IDPL)
No. 2 of 1991	Resume Report	Section—I-C-5	Non-provision for penal interest on plan and non-plan loans (B.C.P.L.)
		Section—I-C-16	Non-charging of depreciation on Endosulfan Technical Project-loss on (H.I.L.)
		Section—I-C-20	Overvaluation of stock-in-trade due to inclusion of General Administrative over-heads, etc. (I.D.P.L.)
		Section—I-C-25	Inclusion of interest on borrowed fund in Administrative Overheads (I.P.C.L.)
		Section—I-C-46	Overvaluation of inventory of finished stock (S.S.P.L.)
		Section—II-5	Syste of Accounts and Book-keeping (B.C.P.L.)
		Section—II-6	System of Accounts and Book-keeping (B.I.L.)
		Section—II-65	System of Accounts and Book-keeping. Cost Control etc. (H.A.L.)
		Section—II-70	System of Accounts and Book-keeping (H.I.L.)
		Section—II-69	Cost Control (Hindustan Fluorocarbons Ltd.,)
		Section—II-73	System of Accounts and Book-keeping (H.O.C.L.)
		Section—II-90	System of Accounts and Book-keeping (I.D.P.L.)
		Section—II-96	Credit Control (I.P.C.L.)
		Section—II-108	System of Accounts and Book-keeping (Maharashtra Antibiotics and Pharmaceuticals Ltd.,)
		Section—II-157	Internal Control (Orissa Drugs and Chemicals Ltd.,
		Section—II-165	System of Accounts and Book-keeping (Rajasthan Drugs and Pharmaceuticals
		Section—II-172	System of Accounts and Book-keeping (S.S.P.L.)
		Section—II-190	System of Accounts and Book-keeping (U.P. Drugs & Pharm. Co. Ltd.,)
No. 3 of 1991	Audit Observations	Para 2.2	Extra expenditure due to delay in payment of electricity bills) I.D.P.L.)
No. 2 of 1993	Comments on Accounts	Para 1.2.3	Fixed Assets included assets of value Rs. 1.42 crores. discarded and declared as scrap (H.I.L.)
		Para 1.3.4	Loss for 1990-91 was understated by non-provision for penal interest (B.C.P.L.)

No. & Year of the Report	Name of Report	Para No., if any & Brief subject	
		Para 1.3.5	Loss for 1990-91 was understated by non-provision for penal interest on Govt. loans (B.I.L.)
		Para 1.3.6	Loss for 1990-91 was understated by non-provision for penal interest on Govt. loans (H.I.L.)
		Para 1.3.7	Profit for 1991-92 was overstated by Rs. 4.94 crores by non-provision of liability of Rs. 2.24 crores for welfare expenses and gifts to employees towards excise duty payable (I.P.C.L.)
		Para 1.3.8	Accumulated loss of 1990-91 was understated by Rs. 154.84 lakhs due to non-provision of interest (M.A.P.L.)
		Para 1.4.3	losses as on 31st March 1992 were 74 per-cent of the paid up capital (Hindustan Antibiotics Ltd.)
		Para 2.1.4	Fixed assets registers were not reconciled with financial books during 1990-91 (I.D.P.L.)
		Para 2.3.1	Selling prices of all products were less than the cost during 1990-91 and 1991-92 in Udyogmandal unit (H.I.L.)
		Para 2.4.3	Physical balance of general stores was not reconciled (H.I.L.)
		Para 2.5.2	Debts outstanding for 3 years as on 31st March. 1991 (H.O.C.L.)
		Para 2.5.3	Debts outstanding for more than 3 years as on 31st March. 1991 (I.D.P.L.)
No. 3 of 1993	Audit observation	Para 2.2	Irregular Award of Contract (H.O.C.L.)
No. 2 of 1994	Comments on Accounts	Para 1.2.4	Loss for 1992-93 was under stated by short provision of gratuity of Rs. 27.36 lakhs (H.I.L.)
		Para 1.2.5	Profit for 1992-93 was understated by Rs. 10.40 lakhs due to overvaluation of stock of finished goods (H.A.L.)
		Para 1.2.6	Sundry debtors (I.D.P.L.)
		Para 1.2.7	Capital work-in-progress included Rs. 1.98 crores being the cost of Railway siding (I.P.C.L.)
No. 2 of 1994	Comments on Accounts	Para 1.3.7	The accumulated losses on 31/3/93 were 69 per cent of the paid up capital (H.A.L.)
		Para 1.3.8	Stock of stores and spares (H.O.C.L.)
		Para 2.1.2	Subsidiary accounts for sundry debtors were not maintained during 1992-93 (S.S.P.L.)
		Para 2.1.3	Fixed assets register was not mainatained during 1992-93 at Endosulfan Technoplant (H.I.L.)
		Para 2.5.1	Sundry debtors on 31st Marhch. 1993 were equivalent to 37.84 percent of sales (H.I.L.)
No. 3 of 1994	Audit observation	Para 1.1	Extra Expenditure due to non-installation of sub-station (I.D.P.L.)
		Para 1.2	Avoidable payment of Commission to an Institutional Agency (I.D.P.L.)
		Para 1.4	Irregular payment to employee opted for Voluntary Retirement Scheme (I.D.P.L.)
		Para 1.5	Expenditure on procurement of R&D equipment not required (I.P.C.L.)
		Para 1.6	Irregular payment of production incentive (U.P.D.P.L.)

LATEST POSITION OF PENDING INSPECTION REPORTS BASED ON AUDIT REPORT 1994-95

PART I (B) (OLD OUTSTANDING OBJECTIONS) (C&PC)

Sl. No.	Year	Para No.	Subject
1.	1986-87	8(a)	Surplus earned by IDPL in respect of trading activity in canalised imported bulk drugs.
2.	1987-88	1	Injudicious Import of Soda Ash Resulting in loss of Rs. 1.08 crores to Government.
3.	1987-88	3	Loss incurred in the import of Caustic Soda.
4.	1988-89	3	Share Capital Investment by Indian Drugs and Pharmaceuticals in Punjab Maize Products Ltd. losses amounting to Rs. 207.17 lakhs.
5.	1988-89	5	Release of funds to CIPET.
6.	1989-90	7	Expenditure under the head 'Bhopal Gas Leak Disaster—irregularities thereof.
7.	1990-91	2(a)	Payment to the Ex-attorney General (Shri K. Parasaran) out of the Bhopal Gas Leak Disaster Proceeding of Claims Act. 1985—payment under Retainer Agreement for engagements of Attorneys under demand No. 54.
8.	1992-93	1	Huge amount recoverable under Drugs prices equilisation account.
9.	1992-93	2	Unauthorised retention of Govt. money by STC realised under 'Methanol Pool Fund'.
10.	1992-93	3	Non-liquidation of increasing liability towards invoked guarantee.
11.	1992-93	13	Dead Stock Register irregularity thereof.
12.	1993-94	2	Huge amount outstanding on account of loans granted to Public Sector Undertakings amounting to Rs. 530.24 crores (HIL. HAL. IDPL. BIL. BCPL and SSPL).
13.	1993-94	3	Non maintenance of records to watch the recovery of huge amount of guarantee fee (IDPL. SSPL. BIL. BCPL. HAL & KAPL).
14.	1993-94	12	Irregularities in maintenance of log books of the vehicles.
15.	1993-94	15	Non furnishing of requisite documents against scooter advance sanctioned to the staff.

PART II

Sl. No.	Year	Para No.	Subject
16.	1994-95	1	Capital restructuring and Rehabilitation Plan for Smith Stanistreet Pharmaceuticals Ltd.
17.	1994-95	2	Capital restructuring and conversion of Loans equal to accumulated losses of Rs. 42.38 crores into equity for Hindustan Antibiotics Ltd. (HAL).
18.	1994-95	3	Implementation of Rehabilitation Plan in Bengal Immunity Ltd.
19.	1994-95	4	Delay in implementation of Revival Package Plan for Indian Drugs & Pharmaceuticals Ltd., declared as "Sick Industrial Co.".
20.	1994-95	5	Irregular investment of Rs. 27 lakhs out of the grant released to the IPFT.
21.	1994-95	6	Cost over run of Rs. 468 crores of Maharashtra Gas Cracker Complex Plant at Nagothane.
22.	1994-95	7	Slow progress of the Grass Root Poly Propylene Project.
23.	1994-95	8	Improper utilisation of funds during 1994-95. (IDPL)
24.	1994-95	9	Release of funds (Plan) to IDPL for the year 1994-95.
25.	1994-95	10	Institute of Pesticides Formulation Technology.
26.	1994-95	11	World Bank Assistance of 12 Million US $ for modernisation of CIPET Loan No. 3258—IN.
27.	1994-95	12	Utilisation Certifications for the Grants released to Statutory bodies/Public Sector Undertakings. (CIPET, IPFT, NIPER, BIL, SSPL).
28.	1994-95	13	Funds paid under Grant-in-Aid for VRS to PSUs. by the Deptt. of C&PC, New Delhi (SSPL, BIL, BCPL and IDPL).
29.	1994-95	14	Control of Production & Prices of Molasses & Alcohal.
30.	1994-95	15	Non insurance of House owned through HBA by Govt. servants.
31.	1994-95	16	Outstanding contingent advances amounting to Rs. 13082 pending for adjustment.
32.	1994-95	17	Excess payment of Rs. 1832/- on account of HRA/CCA and ad-hoc bonus.

PART II—(*Concld.*)

Sl. No.	Year	Para No.	Subject
33.	1994-95	18	Non-admissible mileage allowance allowed to Officers/Officials on tour.
34.	1994-95	19	Inadmissible claims on account of TA/DA by the officials/Officers amounting to Rs. 1208/-.
35.	1994-95	20	Discrepancies/irregularities noticed during the examination of service books.
36.	1994-95	21	Non conducting of Annual Physical verification of stores.
			PART III (TEST AUDIT NOTE)
37.	1984-85	Para 13	Violation of Instructions issued by the Govt.
38.	1990-91	2	Bicycle Account.
39.	1992-93	1	Differences in GPF balances—Non-reconciliation thereof with the PAO's Books.

(OLD OUTSTANDING OBJECTIONS) [DC (PI)]

PART I (B)

Sl. No.	Year & Para No.	Subject
1.	1986-87.4	LIC advance.
2.	— 6	Providing AC facility to non-entitled officers incurring of infractious expenditure of Rs. 27.9061/- and 22160.70.
3.	1987-88.1	Extending of undue benefits to private parties resulting in loss to the Govt.
4.	— 4	Cash Book—irregularities thereof.
5.	— 6	Log Book.
6.	1988-89.1	Misappropriation of Govt. money amounting to Rs. 147.43 and Rs. 1000/- and other irregularities in the Cash Book.
7.	— 5	Irregular fixation of Pay of Sh. V.K. Bhardwaj.
8.	1989-90.3	Short recovery of income tax amounting to Rs. 900/-.
9.	— 4	Over payment of Pay and allowances amounting to Rs. 3640/-.
10.	— 5 (A)	Over payment on a/c of Bonus.
11.	— 6	Stores L/cs—irregularity thereof.
12.	— 7	Cash Book—irregularities thereof.
13.	— 8	Irregularities in the maintenance of GPF ledger in o/o Group 'D' staff.
14.	1990-91.1	Price Equalisation A/C.
15.	— 3	Excess payment of Pay and D.P. amounting to Rs. 3288.00 paid to Sh. M.L. Grover Steno Grade 'C'.
16.	— 3 (B)	Excess payment of Pay and allowance to Sh. C.M. Pothiraj (DD).
17.	— 3 (C)	Cash Book.
18.	1991-92 1	Drawal of Rs. 18.19.615/- from the consolidated Fund of India during the year 1991-92 non-production of records thereof.

PART I (B)—(*Contd*)

Sl. No.	Year &	Para No.	Subject
19.	1991-92.	2	Long outstanding contingent advances amounting to Rs. 1,93,651.00.
20.	—	3	Irregular employment of daily wagers during the year 1991-92 resulting into an unauthorised expenditure of Rs. 42,762.20.
21.	—	4	Over payment of Rs. 2497.45 to the cashiers due to non-furnishing of fidelity/ security bond.
22.	—	5	Reimbursement of conveyance hire charges during 1991-92.
23.	—	6	Outstanding TA/LTC advances to the extent Rs. 22,372/-.
24.	—	7	Stodk registers and Purchase files of Dead stock stationery and consumable items.
25.	1992-93 & 1993-94.	1	Drawal of Rs. 18.20. lakhs 20.21 lakh and 25.00 lakh during 1991-92. 92-93 and 1993-94 respectively from the consolidated fund of India and non-production of records thereof.
26.	—	2	Delay in remittances into the Bank.
27.	—	3	Improper maintenance of Cash Book.
28.	—	4	Irregular LTC Claims.
29.	—	5	Doubtful payment of Rs. 5688.48 on account of repair of vehicle No. DEC 2821.
30.	—	6	Irregular Expdr. of Rs. 3684-64 on account of supply of POL and repairs of Staff Car.
31.	—	7	Irregularities in the maintenance of G. P. Fund Accounts of Group 'D' staff.
32.	—	8	Non-production of records information.

OUTSTANDING AUDIT OBJECTIONS RELATING TO PAO. (C&PC)

Sl. No.	Year	Para No.	Subject	Remarks
1.	1985-86	2	Public Sector Bank suspense unsettled items.	
2.	1985-86	4	Outstandings figures—R. B. Suspense A/c.	
3.	1986-87	9	Unsettled C.D.S. A/c	
4.	1988-89	1	Loan Register and Broad Sheet in respect of Public undertakings.	
5.	—do—	3	Register of Grants-in-Aid.	
6.	—do—	6	Long outstanding under GPF Suspense.	
7.	—do—	8	GPF ledger and Broadsheet.	
8.	—do—	9	Non-maintenance of records.	
9.	1992-93	1	Expenditure incurred under Capital head '6857' in excess of Grant/appropriation.	
10.	—do—	2	Govt. A/c interest on delay transfer of tax collections to Government.	
11.	—do—	3	Non-receipt of 51656 lakhs on account of repayment of loan and interest by Public Enterprises.	
12.	—do—	4	Investments.	
13.	—do—	5	PAO suspense.	
14.	—do—	6	Inward and outward claims.	
15.	—do—	7	Valuables register.	
16.	—do—	8	HBA/Scooter Advance.	
17.	—do—	9	Outstanding utilisation certificate.	
18.	—do—	10	Non-maintenance of Broad Sheet of loan.	
19.	—do—	11	Objection Book.	
20.	—do—	12	Non-maintenance of A. O's check Register.	

LIST OF ITEMS ALLOCATED TO THE DEPARTMENT OF CHEMICALS AND PETRO-CHEMICALS (RASAYAN AUR PETRO-RASAYAN VIBHAG)

1. Drugs and Pharmaceuticals.

2. Insecticides [excluding the administration of the Insecticides Act, 1968 (46 of 1968)].

3. Molasses-distribution and pricing.

4. Alcohol-industrial and potable (excluding Alcoholic drinks from non-molasses base) including the Indian Power Alcohol Act, 1948 (22 of 1948).

5. Dye-stuffs and dye-intermediates.

6. All organic and inorganic chemicals, not specifically allotted to any other Ministery or Department.

7. Planning, development and control of, and assistance to, all industries dealt with by the Department.

8. All attached or subordinate offices or other organisations concerned with any of the subjects specified under this Department.

9. Public Sector projects concerned with the subjects included under this Department except such projects as are specifically allotted to any other Ministry or Department.

10. Bhopal Gas Leak Disaster-Special Laws relating thereto.

11. Petro-chemicals.

12. Industries relating to production of non-cellulosic synthetic fibres (Nylon Polyester, Acrylic etc.).

13. Synthetic rubber.

14. Plastics including fabrications of plastic and moulded goods.

15. All Public Sector units relating to the above matters.

16. All attached and subordinate offices or other organisations concerned with any of the subjects specified in this list.

DRUGS AND PHARMACEUTICALS (MONITORED BULK DRUGS)
ESTIMATED DEMAND & PRODUCTION ACHIEVEMENT (ORGANISED SECTOR)

	Name of the Drug	A/c Unit	1993-94	1994-95		1995-96
			Actual Prodn	Estimated Demand	Actual Prodn	Estimated Demand
	1	2	3	4	5	6
I.	**ANTIBIOTICS**					
1.	**Penicillin**					
	a. Penicillin G. Sodium	MMU	119.80	330.00	121.44	330.00
	b. Penicillin G. Procaine	MMU	184.60		179.64	
	c. Penicillin G. (1st Cry)	MMU	1391.30	2706.00	1666.41	3111.90
	d. Penicillin G. Bensath	MMU	27.81		32.93	
2.	Streptomycin	T	173.46	180.00	103.71	180.00
3.	Chloramphenicol Powder	T	71.47	200.00	20.46	200.00
4.	Chloramphenicol Palmitate	T	9.37		9.34	
5.	Tetracycline	T	51.86	308.00	124.50	323.40
6.	Oxytetracycline	T	157.30	201.00	174.71	211.05
7.	Ampicillin	T	309.61	694.00	328.35*	798.10
8.	Erythromycin	T	127.30	103.00	100.01*	111.24
9.	Amoxicillin	T	375.04	231.00	524.96*	265.65
10.	Doxycycline	T	1.89	13.00	3.40	13.65
11.	Gentamycin	Kg	—	8858.00	—	9743.80
12.	Framycetin	T	4.77	5.00	7.40	5.50
13.	Rifampicin@	T	22.24	312.00	6.54	
14.	Rifa—S	T	94.44		126.41	358.80
15.	Cloxacillin	T	127.47	71.00	131.84	78.10
16.	Cephalexin	T	158.66	139.00	188.88*	159.35
17.	Griseofulvin	T	8.39	71.00	4.84	78.10
II.	**SULPHA DRUGS**					
1.	Sulphamethoxazole	T	1747.59	886.00	1792.14	974.60
2.	Sulphadimidine	T	34.75	250.00	22.52	250.00
3.	Sulphacetamide	T	31.23	67.00	33.54	70.35
4.	Sulphadiazine	T	—	101.00	—	106.05
5.	Sulphamoxole	T	37.25	80.00	43.75	84.00
6.	Sulphaphenazole	T	—	50.00	—	50.00
7.	Sulphaguanidine	T	5.65	N.A.	2.50	(NA)
8.	Sulphasomidine	T	—	N.A.	—	(NA)

*: Estimated

NA: Not available

—: NIL

@ Production in 1994-95 was low due to non-reporting by a major company, viz. Lupinchem

Note: Demand for 1995-96 is estimated by applying the growth rates as worked out in the Report of the Working Group on Drugs and Pharmaceuticals for the Eighth Plan (1990-95).

Name of the Drug	A/c Unit	1993-94	1994-95		1995-96
		Actual Prodn	Estimated Demand	Actual Prodn	Estimated Demand
1	2	3	4	5	6
III. VITAMINS					
1. Vitamin A	MMU	119.10	127.00	94.47	133.35
2. Vitamin B1	T	30.41	143.00	31.74	153.01
3. Vitamin B2	T	15.73	60.00	13.15	64.20
4. Vitamin B12	Kg	556.00	330.00	404.00	353.10
5. Vitamin C	T	920.28	1139.00	979.15	1195.95
6. Vitamin D3	Kg	327.00	570.00	368.00	598.50
7. Vitamin E	T	113.07	23.00	163.40	23.46
8. Folic Acid	T	8.28	11.00	1.10	11.55
9. Nicotinic Acid	T	—	322.00	—	338.10
10. Nicotinamide	T	25.35		—	
11. Vitamin B5	T	71.71	74.00	82.09	77.70
IV. ANALGESICS & ANTIPYRETICS ETC.					
1. Analgin	T	—	2010.00	14.40	2110.50
2. Aspirin	T	1624.37	2144.00	1785.78	2251.20
3. Oxyphenbutazone	T	8.72	60.00	6.26	60.00
4. Phenyl Butazone	T	16.34	90.00	16.76	90.00
5. Paracetamol (reserved for small scale)	T	NA	3543.00	NA	3897.30
6. Pethidine	Kg	131.00	804.00	304.00	844.20
7. Ibuprofen	T	736.64	278.00	608.57	319.70
8. Piroxicam	T	2.32	1.77	1.94	1.95
V. CORTICOSTEROIDS					
1. Dexamethasone	Kg.	409.00	804.00	506.00*	844.20
2. Betamethasone	Kg.	1897.00	1608.00	2065.00	1688.40
3. Prednisolone	Kg.	2019.00	6030.00	2289.00	6331.50
4. Hydrocortisone	Kg.	—	1273.00	—	1336.65
VI. ANTI-T.B. DRUGS					
1. Pas & its salts	T	5.55	60.00	5.00	60.00
2. INH	T	—	443.00	1.00	487.30
3. Thiasetazone	T	30.81	94.00	40.55.	98.70
4. Ethambutol	T	570.80	531.00	675.43*	584.10
5. Pyrazinamide	T	47.02	97.00	49.40	106.70

* = Estimated
— = NIL
SSI = Small Scale Industries production

Name of the Drug	A/c Unit	1993-94	1994-95		1995-96
		Actual Prodn	Estimated Demand	Actual Prodn	Estimated Demand
1	2	3	4	5	6
VII. ANTI MALARIALS					
1. Chloroquin	T	268.22	200.00	325.73*	200.00
2. Amodiaquin	T	21.90	20.00	19.00*	20.00
VIII. ANTI DYSENTERY DRUGS					
1. Metronidazole	T	441.27	709.00	523.13	779.90
2. Tinidazole	T	81.20	71.00	22.13	78.10
3. Diloxaminde Furoate	T	—	124.00	—	136.40
4. Iodocholorohydroxyquinoline	T	239.43	N.A.	239.46	N.A.
IX. ANTI DIABETICS					
1. Chlorpropamide	T	134.94	54.00	88.24*	56.70
2. Tolbutamide	T	68.13	25.00	103.61*	25.00
3. Glybenclamide	T	5.51	2.00	7.37	2.00
4. Insulin	MU	2441.00	6200.00	2764.00	6820.00
X. CNS STIMULANTS					
1. Caffeino	T	99.84	181.00	86.00	190.05
2. Nikethamide	T	—	3.00	—	3.00
XI. DIURETICS					
1. Frusemide	T	7.25	11.00	12.65	11.55
2. Acetazolamide	T	5.40	3.00	8.26	3.00
3. Hydrochlorothazide	T	6.08	5.00	5.18	5.15
4. Spironelactone	T	0.81	2.01	0.62	2.11
XII. ANTI ASTHAMATICS					
1. Ephedrine	T	60.29	67.00	60.00*	70.35
2. Salbutamol	Kg.	11479.00	4020.00	19653.00	4221.00
3. Terbutaline	Kg.	819.00	603.00	930.00	633.15
4. Theophylline	T	240.00	335.00	163.86	351.75
5. Aminophylline	T	8.38		3.38	
XIII. CARDIVASCULAR DRUGS					
1. Propranolol	T	8.53	16.00	6.12	16.80
2. Xanthinol Nicotinate	T	11.64	20.00	9.39	21.00
3. Digoxin	Kg	34.85	47.00	31.00	49.35
4. Methyl Dopa	T	3.32	67.00	5.32	70.35

* = Estimated
NA = Not available
— = NIL

Name of the Drug	A/c Unit	1993-94	1994-95		1995-96
		Actual Prodn	Estimated Demand	Actual Prodn.	Estimated Demand
1	2	3	4	5	6
XIV. AANAESTHETICS					
1. Lignocaine/Xylocaine	T	8.69	35.00	8.70	38.50
2. Procaine	T	24.03	106.00	5.95	116.60
XV. ANTI HISTAMINS					
1. Pheneramine Maleate	T	33.76	34.00	48.36	35.70
2. Diphenhydramine	T	—	24.00	—	25.20
XVI. ANTI HELMENTICS					
1. Piperazine and Salts	T	—	50.00	—	50.00
2. Mebandazole	T	3.88	104.00	1.06	119.60
3. Tetramisole/Levamisole	T	—	35.00	—	38.50
4. Pyrantel Palmoate	T	23.82	21.00	70.83*	22.05
XVII. TRANQUILIZERS & SEDATIVES					
1. Phenobarbitone	T	—	20.00	—	20.00
2. Diazepam	T	1.08	30.00	—	32.10
3. Trifluperazine	T	0.11	2.50	0.32	2.50
4. Imipramine	T	1.00	7.00	0.07	7.35
5. Nitrazepam	Kg	207.00	600.00	407.00	642.00
XVIII. ANTI FILARIALS					
1. Diethyl Carbamazine (DEC Citrate)	T	—	45.00	—	45.00
XIX. ANTI LEPROTICS					
1. Dapsone	T	12.00	67.00	11.78	70.35
2. Clofazamine	T	6.11	3.35	8.54	3.52
XX. OTHER ANTI BACTERIALS					
1. Trimethoprim	T	388.41	177.00	309.06*	194.70
2. Nalidixic Acid	T	38.50	62.00	40.30	68.20
XXI. GASTRO INTESTINAL					
1. Ranitidine	T	186.13	71.00	237.79	78.10

*: Estimated

—: NIL

ANNEXURE-III

CAPACITY AND PRODUCTION OF CHEMICALS DURING 1994-95, 1995-96, (ESTT.) & ANTICIPATED PRODUCTION DURING 1996-97

Chemicals/Industry	Unit	Inst. Cap	Production		
			1994-95	1995-96	1996-97
			Actual	(Estt.)	Anticipated
1	2	3	4	5	6
I. Inorganic Chemicals					
1. Soda Ash	'000'T	1654.6	1408.6	1522.1	1450.0
2. Caustic Soda		1311.7	1156.1	1200.0	1250.0
3. Liquid Chlorine		759.8	677.2	690.0	720.0
4. Carbon Black		237.7	177.4	223.6	220.0
5. Calcium Carbide		150.0	97.4	95.3	120.0
6. Red Phosphorus		1.7	0.9	1.0	1.1
7. Titanium Dioxide		46.5	30.2	32.0	35.0
8. Aluminium Flouride		30.1	14.3	17.0	16.0
9. Potassium Chloride		13.3	4.8	5.0	5.4
10. Sodium Chlorate		2.4	1.8	2.0	2.2
II. Organic Chemicals					
1. Acetone		63.6	42.0	48.0	50.0
2. Aniline		28.1	13.7	15.0	16.0
3. Acetic Acid		128.9	89.9	100.0	110.0
4. Acetic Anhydride		52.9	32.7	35.0	38.0
5. Citric Acid		6.3	6.0	6.0	6.2
6. Chloro Methanes		39.0	36.7	37.0	38.0
7. Methanol		356.0	376.8	380.0	385.0
8. Maleic Anhydride		23.4	17.0	18.0	20.0
9. Phenol	'000'T	66.6	57.8	60.0	62.5
10. Pentaerithritol		11.4	11.5	12.0	13.0
11. Formaldehyde		211.8	167.7	175.0	182.0
12. Isobutyle (Alcohol)		1.0	0.7	0.7	0.8
13. Nitrobenzene		46.5	30.1	30.5	32.0
14. ONCB		4.3	4.9	5.0	5.0
15. PNCB		9.2	10.0	10.0	11.0
16. MEK		7.0	6.4	6.0	6.5

1	2	3	4	5	6
III. Pesticides (Tech.) Insecticides					
1. B.H.C. (13% GAMA)		37.0	32.0	25.0	20.0
2. DDT		9.1	4.3	4.4	4.4
3. Malathion		7.5	2.8	3.0	4.0
4. Methyl Parathion		4.5	2.1	2.2	2.4
5. Fenitrothion		0.5	0.01	0.0	0.0
6. Fenthion			0.1	0.1	0.1
7. Dimethoate		2.3	2.1	2.2	2.2
8. D.D.V.P.		3.0	1.2	1.3	1.4
9. Quinalphos		3.2	2.8	3.0	3.2
10. Monocrotophos		13.6	8.8	9.0	10.0
11. Phosphamidon		4.5	1.3	2.0	2.2
12. Phorate	"00"T	4.0	4.1	4.0	4.1
13. Ethion		0.9	1.0	1.0	1.0
14. Endosulphan		7.3	6.7	6.8	7.0
15. Fenvalarate		1.3	1.2	1.3	1.3
16. Cypermethrin		1.1	1.4	1.4	1.5
17. Anilophos		1.0	0.2	0.2	0.2
18. Acephate		0.8	0.9	0.9	0.9
19. Chlorpyriphos		1.2	0.6	0.7	0.8
20. Phosalone		1.0	0.3	0.3	0.3
21. Metasystox		0.3	0.4	0.4	0.5
22. Abate		"	0.06	NEG	NEG
23. Triazophos		"	0.4	0.8	1.0
Fungicides					
24. Captan & Captafol		1.8	0.7	0.8	0.9
25. Thiram (Thiocarbamate)		0.2	0.04	0.04	0.05
26. Ziram (Thiocarbamate)		0.4	0.3	0.3	0.4
27. Carbendazim (Bavistin)		1.2	0.6	0.7	0.8
28. Calixin		0.5	0.3	0.4	0.5
29. Mancozab		4.0	4.1	4.0	4.2
Herbicides					
30-2.4-D		1.8	0.7	0.8	1.0
31. Butachlor		4.1	0.9	1.0	1.2

1	2	3	4	5	6
Weedicides					
32. Isoproturon	"000"T	3.9	4.2	4.2	4.5
33. Basalin		0.3	0.1	0.1	0.2
34. Diuron		0.3	—	0.2	0.2
35. Glyphosate		0.9	0.8	0.8	0.9
Rodenticides					
36. Zinc Phosphide		0.9	0.5	0.6	0.7
Fumigants					
37. Aluminium Phosphide		1.8	1.8	2.0	2.0
38. Methyle Bromide		0.3	0.07	0.07	0.08
Grand Total (Tech. Pesticides)		126.6	89.88	86.01	86.13

Note :—Combined capcity. plant being multipurpose.

IV. **Dyes & Dyestuffs**

1. Azo Dyes	"000"T	4.9	2.8	2.8	3.0
2. Acid Direct Dyes (Other than Azo)		1.0	0.4	0.4	0.5
3. Disperse Dyes		3.5	3.0	3.5	4.0
4. Fast Colour Bases		1.3	0.3	0.4	0.5
5. Ingrain Dyes		0.3	0.06	0.06	0.1
6. Oil Soluble (Solvent Dyes)		0.02	0.1	0.1	0.1
7. Optical Whitening Agents		1.4	1.0	1.0	1.0
8. Organic Pigment Colours		11.0	8.3	8.5	9.0
9. Pigment Emulsion		5.0	4.5	4.5	5.0
10. Reactive Dyes		5.1	3.9	4.0	4.5
11. Stabilised Azoics (Rapid Fast/ Rapidogin)		0.2	—	—	—
12. Sulphur Dyes (Sulphur Black)		4.2	2.6	2.4	2.5
13. Vat Dyes		2.5	2.4	2.5	2.5
14. Solubilised Vat Dyes		0.3	0.1	0.1	0.2
15. Food Colours		0.1	0.08	0.08	0.1
16. Napthols		1.9	1.2	1.2	1.4
17. Other Dyes (Including Acry. Fibre)		2.3	—	1.0	1.0
Total :		45.02	30.74	32.54	35.4

ANNEXURE-IV

CAPACITY AND PRODUCTION OF MAJOR PETROHEMICALS DURING 1994-95,1995-96 (ESTT.) & ANTICIPATED PRODUCTION DURING 1996-97

(Figures in 000'MT)

Product	1994-95		1995-96				1996-97	
	ACTUALS		ANTICIPATED		ACTUAL		ANTICIPATED	
	Installed Capacity	Prodn.	Installed Capacity	Prodn.	Installed Capacity	Prodn.	Installed Capacity	Prodn.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SYNTHETIC FIBRES								
1. AF	98.00	81.39	98.00	80.00	98.00	74.29	114.00	103.00
2. NFY	*	39.38	*	40.00	*	41.22	*	60.00
3. NIY/TC	*	45.73	*	45.00	*	54.59	*	56.00
4. PFY	*	294.18	*	350.00	*	349.39	*	700.00
5. PSF	259.00	220.29	291.00	230.00	291.00	231.38	574.00	470.00
FIBRE INTERMEDIATES								
6. ACN	30.00	26.51	30.00	24.00	30.00	26.60	30.00	27.00
7. CAPROLACT.	120.00	97.47	120.00	110.00	120.00	112.65	120.00	120.00
8. DMT/PTA	420.00	440.76	420.00	480.00@	420.00	455.36	990.00	890.00
9. MEG	220.00	175.52	240.00	200.00	240.00	197.93	340.00	306.00
POLYMERS								
10. LDPE	200.00	180.80	200.00	190.00	200.00	185.24	200.00	190.00
11. LLDPE/HDPE	355.00	319.45	355.00	380.00@	355.00	376.87	860.00	600.00
12. PP	115.00	107.38	115.00	180.00@	115.00	114.00	430.00	250.00
13. PS	71.00	51.84	140.00	95.00	140.00	87.52	174.00	105.00
14. PVC	465.00	469.02	465.00	550.00@	465.00	496.02	820.00	650.00
15. ABS	32.00	22.66	32.00	20.00	32.00	23.96	45.00	44.00
SYNTHEIC RUBBER								
16. SBR	50.00	34.11	50.00	45.00	50.00	35.05	84.00	67.00
17. PBR	20.00	19.24	20.00	28.00@	20.00	21.38	50.00	36.00
SYNTHETIC DETERGENT								
18. LAB	199.00	213.56	199.00	220.00@	199.00	225.12	219.00	225.00
OTHERS								
19. PX	288.00	207.55	288.00	210.00	288.00	225.59	324.00	292.00

Note: This information is available with the Department as furnished by Industrial Units.

*: UNDER BROADBANDING

@ : Higher Production expected due to likely capacity/operational efficiencies.

ANNEXURE-V

LIST OF ATTACHED OFFICE AND PUBLIC SECTOR UNDERTAKINGS AND OTHER ORGANISATIONS UNDER THE ADMINISTRATIVE CONTROL OF THE DEPARTMENT OF CHEMICALS AND PETROCHEMICALS

Attached office

Office of the Development Commissioner (Pharmaceuticals Industry)

Public Sector Undertakings

Hindustan Organic Chemicals Ltd., Rasayani (Maharashtra)

Hindustan Insecticides Ltd., New Delhi

Indian Drugs and Pharmaceuticals Ltd., Dundahera Industrial Complex, Dundahera, Gurgaon (Haryana)

Hindustan Antibiotics Limited, Pimpri, Pune (Maharashtra)

Smith Stanistreet Pharmaceuticals Ltd., Calcutta (W.B.)

Bengal Chemicals & Pharmaceuticals Ltd., Calcutta (W.B.)

Bengal Immunity Limited, Calcutta (W.B.)

Indian Petrochemicals Corporation Ltd., P.O. Petrochemicals, District Vadodara (Gujarat)

Other Organisations

Petrofils Co-operative Limited, P.O. Petrofils, Distt. Vadodara (Gujarat)

Central Institute of Plastic Engineering & Technology, Guindy (Madras)

Institute of Pesticides Formulation Technology, Gurgaon (Haryana)

National Institute of Pharmaceuticals Education and Research, Mohali (Punjab).

MGIPF—762 M/o C & F/95