

OUTCOME BUDGET

2016-17

**GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF CHEMICALS AND PETROCHEMICALS**

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EXECUTIVE SUMMARY

The chemical industry is an important part of the growing Indian industry. It includes basic chemicals and its products, petrochemicals, fertilizers, paints, varnishes, gases, soaps, perfumes and toiletries and pharmaceuticals. It is one of the most diversified of all industrial sectors, covering thousands of commercial products.

Petrochemicals, which comprise plastics and a host of other chemicals, are downstream products of hydrocarbons derived from crude oil and natural gas. These hydrocarbons are valuable resources and constitute vital raw materials for industries. The value additions in the petrochemicals chain offer immense possibilities and cater to the need of textiles and clothing, agriculture, packaging, infrastructure, healthcare, furniture, automobiles, information technology, power, electronics and telecommunication, irrigation, drinking water, construction and a host of other articles of daily and specialized usage.

There are three PSUs in the chemical sector namely Hindustan Organic Chemicals Ltd. (HOCL), Hindustan Insecticides Ltd. (HIL) and Hindustan Fluorocarbons Limited (HFL), which is a subsidiary of HOCL, and one PSU in the petrochemical sector viz. Brahmaputra Cracker and Polymer Ltd. (BCPL). The autonomous institutes under this Department are Central Institute of Plastics Engineering and Technology (CIPET) and Institute of Pesticides Formulation and Technology (IPFT).

The Department proposes to continue implementation of projects/schemes during 2016-17, envisaged for the 12th Five Year Plan and beyond. Some of them are outlined below:-

I. Petroleum, Chemicals and Petrochemicals Investment Regions (PCPIRs):

The concept of Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs) is a cluster approach to promote the Petroleum, Chemical and Petrochemical sectors in an integrated and environment friendly manner, on a large scale.

At present, PCPIRs are being set up in the four coastal States of Gujarat, Andhra Pradesh, Odisha and Tamil Nadu. PCPIR proposals of Andhra Pradesh and Gujarat were approved in February 2009, while proposals of Odisha and Tamil Nadu were approved in December 2010 and July 2012 respectively. The latest MoA has been signed with the Government of Tamil Nadu on 20th February, 2014. As on 31st December, 2015 investments worth Rs. 1,60,600 crore approximately have been made in these PCPIR regions.

II. Assam Gas Cracker Project:

The Assam Gas Cracker Project was initiated in pursuance of the Memorandum of Settlement signed between Central Government, All Assam Students Union (AASU) and All Assam Gana Parishad (AAGP) on 15th August 1985. The Cabinet Committee on Economic Affairs (CCEA), in its meeting held on 18th April, 2006, approved the setting up of the Assam Gas Cracker Project at a project cost of Rs. 5460.61 crore. A joint venture company namely M/s Brahmaputra Cracker &

Polymer Limited (BCPL), is implementing the project. Owing to various reasons, the project has witnessed cost and time overruns. The revised cost estimate of Rs. 8920 crore (on 'as built basis') was approved by the CCEA on 16th November, 2011 .

In view of time overrun, foreign exchange fluctuations, price escalation, increase in statutory levies etc., further cost and time escalation has occurred and therefore, BCPL has proposed revised project cost of Rs. 9,965 crore as against the approved project cost of Rs.8,920 crore. The revised project cost has been estimated based on timelines for overall commissioning by December, 2015. The estimated increase in project cost of Rs. 1045 crore is proposed to be funded by capital subsidy of Rs. 549.45 crore, equity of Rs. 148.67 crore and debt of Rs. 346.88 crore

Further, in order to make the project economically viable, BCPL has proposed in-principle approval for feedstock subsidy on natural gas with an annual review for 15 years of plant operation for maintaining a minimum Internal Rate of Return (IRR) of 10% and revenue subsidy of Rs. 26 crore to fund the cash deficit during initial one year. The proposal will be placed before the Public Investment Board (PIB) as per the laid down procedure.

The AGCP has been commissioned on 2nd January, 2016 and it has been dedicated to the Nation by Hon'ble Prime Minister of India, Shri Narendra Modi on 5th February, 2016 at BCPL Complex, Lepekata, Dibrugarh. This project is of economic significance for the State of Assam and the North East Region as it is expected to lead to substantial employment and income generation in downstream industries.

iii. Public Sector Undertakings:

Hindustan Organic Chemicals Limited (HOCL)

Hindustan Organic Chemicals Limited (HOCL) was incorporated on 12th December, 1960 as a Government company with the objective of setting up manufacturing capacities for chemicals / intermediates required for production of dyes, dyes–intermediates, rubber chemicals, pesticides, drugs and pharmaceuticals, laminates, etc. The company has two manufacturing units located at Rasayani (Maharashtra) and Kochi (Kerala). The Rasayani unit (Chemical Complex) started production from 1970-71 and the Kochi Unit (Phenol Complex) commenced production from 1987-88. Main products manufactured by HOCL include phenol, acetone and hydrogen peroxide at Kochi unit and aniline, nitrobenzene, formaldehyde, concentrated nitric acid and di-nitrogen tetroxide (N₂O₄) at Rasayani unit. HOCL is the sole manufacturer of N₂O₄ in India which is supplied to ISRO for satellites launching programme.

HOCL also has a subsidiary company M/s Hindustan Fluorocarbons Limited (HFL) located at Rudraram, District Medak, Telangana.

Hindustan Fluorocarbons Ltd. (HFL)

Hindustan Fluorocarbons Ltd. (HFL), a subsidiary company of HOCL, was incorporated on 14.07.1983. It is located at Rudraram, District Medak, Telangana. The company started production in the year 1987 and is engaged in the manufacture of Poly Tetra Fluoro Ethylene (PTFE) and of Chloro Di Fluoro Methane (CFM-22). PTFE is extensively used in chemical, mechanical, electrical and electronic industries and has strategic applications in defence and aerospace sectors. CFM-22 is used as a refrigerant gas and also as feedstock for production of PTFE.

Hindustan Insecticides Limited (HIL)

Hindustan Insecticides Limited (HIL) was incorporated in March, 1954 for manufacture and supply of DDT (dichlorodiphenyltrichloroethane). In 1957, the company set up a factory at Udyogmandal, Kerala, for manufacture of DDT and in 1977 at Rasayani, Maharashtra, for manufacture of Malathion, an insecticide. The third unit of HIL was set up at Bhatinda, Punjab, in 2003. Rasayani and Udyogmandal plants have both DDT manufacturing and agrochemical manufacturing facilities while Bathinda has only formulations manufacturing and packaging facility. All the units of HIL are today holding the Integrated Management System certification (i.e. combination of all the ISO Certificates). The company has 7 Regional Sales Offices across India and a wide network of dealers for marketing and distribution of its products.

iv. e-Governance:

With a view to increase office automation and enhance transparency, as per requirements of e-Governance, the office Procedure Automation (OPA) System, Comprehensive DDO Package for pay bill & GPF, File Tracking System (FTS) and Public Grievances Redress & Monitoring System (PGRAMS) have been implemented in the Department. In compliance with Government of India's orders relating to e-Procurement, all the Tender inviting Notices issued by the Department are being uploaded on the website of the Department.

v. Monitoring:

Close monitoring of the Outcome Budget targets is being done in the Department. Half-yearly review is also undertaken by Ministry of Finance through Pre-Budget discussions at RE stage etc.

CHAPTER- I

INTRODUCTION - GOALS, OBJECTIVES AND POLICY STATEMENTS

1.1 Department of Chemicals and Petrochemicals endeavors to:

I. Formulate and implement policies and programmes for achieving growth and development of the chemicals and petrochemicals sectors in the country; and

II. Foster the spirit of public-private partnership for the over-all development of the above mentioned sectors of industry.

1.2 The major goals of the Department are:

I. Development of 4 PCPIRs to promote manufacturing and exports.

II. The Assam Gas Cracker Project (AGCP) has since been commissioned on 02.01.2016 and dedicated to nation by Hon'ble PM on 05.02.2016.

III. Strengthening of Central Institute of Plastic Engineering and Technology (CIPET) so as to achieve its targets of skill development.

IV. Set up Plastic Parks to promote MSMEs in the sector in a cluster approach.

1.3 In view of the delicensed and deregulated nature of the chemical and petrochemical sectors, public sector investment through Plan schemes is limited. The major Plan scheme being implemented, besides the releases made to PSUs and autonomous institutions, is the Assam Gas Cracker Project.

1.4 The Department has four major divisions viz. Chemicals, Petrochemicals, Planning & Evaluation (P&E) and Statistics & Monitoring (S&M) through which it implements its schemes and programmes. The Internal Finance (IF) Division is common to all three Departments in the Ministry.

National Policy on Petrochemicals:

1.5 The Petrochemicals sector in India has the potential of capturing large investments to become a major global player. The National Policy on Petrochemicals announced in 2007 aimed to increase investments in the sector, both upstream and downstream, increase the use of petrochemicals in thrust areas, facilitate investment in the emerging areas of the petrochemical sector and achieve environmentally sustainable growth through innovative methods of development of bio-degradable polymers and plastics.

Schemes Benefiting Women/children and SC/ST:

1.6 The Departmental Budget does not contain any component specifically benefiting women, children and/or SC/ST. The department is exempt from earmarking Plan outlays under SCSP (Special Component Sub Plan) and TSP

(Tribal Sub Plan). However, the autonomous organizations under the Department undertake programmes benefiting women and SC/ST. Exclusive programmes for the benefit of SC/ST and Women candidates are organized by CIPET through sponsorship by respective State Governments for training professionals in entrepreneurship and skill development. This provides them with the competence to work in the industry at the operating level or start their own tiny or cottage level industry. The programmes are thus helpful in generation of both employment and self-employment. The programmes organized for the benefit of women are focused on developing self-help groups and creating necessary workforce for plastic waste management. A large number of women and SC/ST candidates have benefited from these programmes and this will continue during 2016-17.

CHAPTER– II

STATEMENT OF BUDGET ESTIMATES (SBE) - FINANCIAL OUTLAYS AND PHYSICAL TARGETS FOR 2016-17

2.1 A statement showing the financial outlays under Plan and Non-Plan provisions of the Budget 2016-17 and the physical targets for the year is at Annexure-I.

BE 2016-17 Non-Plan:-

2.2 The BE Non-Plan for the year has been approved at Rs. 42.04 crore which includes revenue budget of Rs. 42.01 crore and capital loans to PSUs of Rs. 0.01 crore each (token provision). The provision under revenue is for Secretariat expenditure of the Department (primarily for IT activities), for the office of Welfare Commissioner for payment of compensation (ex-gratia) to Bhopal Gas victims, and for Institute of Pesticides Formulation Technology (IPFT).

BE 2016-17 PLAN:-

2.3 A Gross Budgetary Support of Rs. 160 crore has been approved for the Annual Plan of the Department for the year 2016-17. Highlights of the Plan are given in the following paras:-

Statement of Budget Estimate (SBE):

(Rs. In crore)

Sl. No.	Name of the Scheme	2014-15	2015 - 16			2016 - 17
		Exp.	BE	RE	Exp. upto 12.02.2016	BE
I.	Project Based Support to PSUs	31.80	32.00	15.00	0.00	40.00
1.1	Hindustan Organic Chemicals Ltd.(HOCL)	0.00	17.00	0.00	0.00	25.00
1.2	Hindustan Insecticides Ltd. (HIL)	15.00	10.00	10.00	0.00	15.00
1.3	Hindustan Fluorocarbons Ltd.(HFL)	16.80	5.00	5.00	0.00	0.00
II.	Project Based Support to Autonomous Bodies	102.53	93.68	108.68	108.68	65.99
2.1	Central Institute of Plastic Engineering & Technology (CIPET)	100.85	92.68	107.68	107.68	57.67
2.2	Institute of Pesticides Formulation Technology (IPFT)	1.68	1.00	1.00	1.00	8.32
III.	Other Ongoing	17.05	62.32	18.21	8.16	54.01

	Schemes					
3.1	Assam Gas Cracker Project (AGCP)	0.00	0.01	0.01	0.00	0.01
3.2	Chemical Promotion & Development Scheme (CPDS)	3.53	1.90	3.90	2.52	5.00
3.3	Chemical Weapons Convention (CWC)	0.87	1.00	1.00	1.00	1.00
3.4	IT/Secretariat	0.48	1.00	0.80	0.49	0.00
3.5	Other New Schemes of Petrochemicals	12.17	58.41	12.50	8.84	48.00
	Total	151.38	188.00	141.89	121.53	160.00

Public Sector Undertakings:

Hindustan Organic Chemicals Limited (HOCL)

2.4 During 2015-16, a provision of Rs.17 crore as Plan loan was kept for HOCL for upgradation of plant and machinery. However, this provision was surrendered in the First Batch of Supplementary Demands for Grants for 2015-16. HOCL being a defaulter company and its revival plan/packages not been approved by BIFR, the amount of Rs. 17 crore allocated to it at BE stage was likely to be surrendered. Hence, it was decided to surrender the same for obtaining technical supplementary through Parliament.

2.5 For 2016-17, Plan budgetary support of Rs.25 crore has been provisionally made for the company. However, in view of the poor financial condition of the company, release of the above provision will be subject to its ability to repay outstanding Government loans / interest dues and annual interest dues on bonds raised from the market with Government of India guarantee.

Hindustan Fluorocarbons Limited

2.6 Plan loan provision of Rs.5.00 crore for HFL has been kept in the Department's budget for 2015-16. A proposal for setting up 800 KW solar power plant at the company's factory premises at Rudraram with the above Plan loan was received from the company. However, in view of guidelines issued by Ministry of Finance vide OM dated 3.2.2016 providing that the window of investment and working capital loans to CPSUs from Govt. of India in general is hereby closed and that CPSUs should raise debt from market or from banks, a decision has been taken by the Department to not further process the release of plan loan of Rs. 5 Crore to HFL.

2.7 No Plan budgetary support has been proposed for HFL during 2016-17.

Hindustan Insecticides Limited

2.8 HIL faces liquidity shortage on account of delays in DDT related payments by the Ministry of Health and Family Welfare. During 2015-16, HIL has been allocated Rs.10.00 crore as budgetary support for release as Plan loan for upgradation of plant and machinery. A proposal received from the company for releasing the above Plan loan for setting up a multi-product facility at its Rasayani unit for manufacture of fungicides (Hexaconazole and Tebuconazole), is under process. Setting up of the multi-product facility will enable the company to further diversify its agrochemical business and reduce the company's dependence on DDT revenues.

2.9 During 2016-17, provisional allocation of Rs.15.00 crore has been kept in the Department's budget for capital projects and upgradation of plant and machinery of HIL.

Autonomous Institutes/Organizations:

Central Institute of Plastics Engineering and Technology (CIPET):

2.9 CIPET—functions under the administrative control of the Department of Chemicals & Petrochemicals, Govt. of India. This is an ISO 9001:2008 QMS certified, NABL, ISO/IEC 17020 accredited premier national Institution devoted to **Academic, Technology Support & Research (ATR)** activities for the growth of polymer & allied industries in the country. CIPET has its centres at 28 locations in the country which include:

- 5 High Learning Centres at Chennai / (HQ), Ahmedabad, Bhubaneswar, Lucknow & Kochi.
- 13 other learning centres at Amritsar, Aurangabad, Bhopal, Guwahati, Hyderabad, Hajipur, Haldia, Jaipur, Imphal, Mysore, Raipur, MCTI Campus Bhubaneswar and Murthal.
- 02 R&D wings -Advanced Research School for Technology & Product Simulation (ARSTPS) at Chennai & Laboratory for Advanced Research in Polymeric Materials (LARPM) at Bhubaneswar,
- 02 specialized units – Advanced Tooling and Plastics Product Development Centre (ATPDC) at Madurai & Advanced Plastics Processing Technology Centre (APPTC) at Balasore.
- 04 Vocational Training Centre at Baddi, Vijayawada, Bhopal and Medak.
- 01 Plastics Waste Management Centre at Guwahati and
- 01 Polymer Data Services at Gurgaon.

2.10 All the centres have up to date infrastructural facilities in the areas of Design, CAD/CAM/CAE, Tooling & Mould Manufacturing, Plastics processing, Testing and Quality control to cater to the needs of polymer & allied industries in the country.

2.11 CIPET's academic programs include Doctoral, Postgraduate, Undergraduate, Diploma, Post Diploma and Certificate Level course as well as Vocational Skill Development training programs in Polymer Science & Technology to fulfill the human resource requirements of polymer and allied industry. During the XI Five Year Plan,

CIPET had trained 1,16,638 students through various long term and short term skill development programs. The target for XII Plan is to train around 2,20,000 students.

2.12 The Undergraduate, Postgraduate & Doctoral programs are offered at High Learning Centres in affiliation/collaboration with respective reputed State Universities. In the year 2013 – 14, 11494 students enrolled for the long term programs and in the year 2014 – 15, 12629 students have been admitted, which is around 10% more than the previous year. Apart from the regular long term courses, the institute also offers highly specialized and customized short – term programs in the field of Plastics Engineering & Technology to update and improve the skills competency of technical manpower in the plastics and its allied industries. In the year 2013 – 14, 28,498 participants were provided training through various Skill Development Training Programs. During the year 2014-15, 30281 participants were benefited. CIPET is committed to achieve the target of 80000 participants through long-term & short-term training programs.

2.13. CIPET also conducts various skill development training programs sponsored by Govt. Departments / agencies such as Ministry of DONER, Ministry of Social Justice & Empowerment, SC/ST Welfare Department, Minorities Department etc. in the area of Plastics Engineering & Technology for the benefits of unemployed / under employed youth of India.

2.14 CIPET renders Technology Support Services in design, tooling, processing, testing and quality assurance both in India and abroad. The biodegradable testing facility of CIPET is first of its kind in the country and works jointly with European Bioplastics & International Biodegradable products Institute.

2.15 With an objective to grow in Research and Development CIPET has established two exclusive R & D wings at Chennai and Bhubaneswar. The Advanced Research School for Technology & Product Simulation - ARSTPS at Chennai focuses on innovative product design for automobile, aerospace, medical and packaging industries, product and tool design conceptualization, e-manufacturing of prototypes, rapid prototyping for lead time reduction, reverse engineering for metal Substitution with aesthetic and ergonomical approach. The Laboratory for Advanced Research in Polymeric Materials (LARPM) at Bhubaneswar concentrates on bio polymers, e-waste recycling, polymer composites & nanocomposites, characterization of blends, alloys, and fuel cells. The main objectives of the R & D wings are to collaborate in R&D projects with the industry, and with Indian and Foreign universities, to develop working prototypes, to find solutions to engineering problems, and to conduct micro-analysis on behavior of materials, structures and mechanical systems.

2.16 CIPET has signed Memoranda of Agreement with several leading international universities for faculty and student exchange programs, bilateral R & D initiatives and collaborative research projects. CIPET has established very good interaction with regional & national plastics associations in India and it is a founder member of Plastindia Foundation.

2.17 In order to fulfill the requirements of skilled manpower for the plastics industry in the country, CIPET has a target to train around 6.20 lakh persons during the period 2011-22, as part of the National Skill Development initiative. As on

31.01.2016, Central Institute of Plastics Engineering and Technology (CIPET) has trained 48162 persons under Skill Development Training Programme as against 42910 persons trained during 2014-15..

2.18 There was an allocation of Rs. 107.68 crore for CIPET in 2015-16 for its continuing and new Plan Schemes. This allocation will meet the requirements to provide civil and technical infrastructure for expansion of CIPET centres, creation of hostel facilities and to augment intake capacity of existing and new academic and skill development programmes, enriching CIPET's capabilities to offer technical support services to plastics and allied industry, undertake research and development projects in the area of cutting edge technologies and establishment of Centre for Biopolymer Science and Technology (CBPST) at Kochi to promote environment friendly plastic technologies. The infrastructure so generated will help in achieving the targets set for skill development through long term and short term courses during 2015-16. During 2016-17, CIPET has been allocated an amount of Rs. 57.67 crore (in BE) to continue implementation of the schemes envisaged in the 12th Plan period.

Institute of Pesticide Formulation Technology (IPFT):

2.19 IPFT located at Gurgaon (Haryana) is a non-profit making organization, registered under the Societies Registration Act in May 1991, under the Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India. The main objective of the Institute of Pesticide Formulation Technology is Development and Production of state-of-the-art user and environment friendly pesticide formulation technology and Promotion of efficient application technologies suiting the existing requirements of the newer formulations. IPFT has established a healthy rapport with the Pesticide Industry and has been able to successfully transfer technology for safer, efficient and environment friendly formulations. IPFT is served by four major Functional Divisions, namely, Formulation Technology Division, Analytical Science Division, Bio-Science Division and a Pilot Plant Division. The Institute carries out both in-house and external projects.

2.20 IPFT continues to be accredited Laboratory by National Accreditation Board for Testing & Calibration Laboratories (NABL) as per ISO/IEC – 17025 (2005) for the analysis of pesticides and their formulations, pesticide residues in food matrices and CWC related chemicals. IPFT received record number of Industry sponsored projects for data generation on Bioefficacy, Phytotoxicity, Residue Analysis and Stability Studies. IPFT signed MoU with Higher School of Agriculture, University of Lome, Togo for collaborative Research Work and signed MoUs and CDA with Krish Biotech, Kalyani and Biotech International.

2.21 IPFT has become an IGNOU Programme Study Centre for “Post Graduate Diploma in Analytical Chemistry (PGDAC)” with effect from January, 2015 and it continued in the year 2016-17. IPFT has successfully developed Solid WDG formulation of liquid insecticide Chlorpyrifos. The patent has been filed. IPFT has developed water based micro-emulsion combination formulation of two herbicides. IPFT has developed nano formulations from plant extract which may minimize use of synthetic pesticides. Development of standard homogenous population of *Helicoverpa armigera* and *Spodoptera* collected from field and transfer under lab conditions. IPFT has successfully developed nano-encapsulated sprayable formulation for inpregnation of insecticide in soldiers dress. IPFT has been certified

by Central Insecticide Board Registration Committee (CIB/RC) for the data generation on Bioefficacy, Phytotoxicity and pesticide residue analysis. IPFT presented a country paper entitled “Plant protection strategy and Biopesticides in India” at Regional Network on Pesticide for Asia and the Pacific (RENAP) held at Kathmandu, Nepal. IPFT has brought out leaflets for promotion of safe and adequate use of pesticides at Farmer’s field level and distributed the same to farmers. Neem based commercially viable economic formulations have been developed with high efficacy as compared to presently available neem based pesticide formulations. Data is being generated for registration with Central Insecticide Board (CIB) to bring the product in the market for directly use by the farmers.

2.22 Under R & D, IPFT has In – House Projects as well as sponsored project for the XII Five Year Plan.

In – House Projects : (a) Development of User & Environment Friendly Water Dispersible Granule Formulations of Highly Toxic, Broad Spectrum & effective Pesticides to reduce their Toxicity for Continuation of Use and Prevention from Ban. (b) Development of Mass Production Technique and Formulation for Baculoviruses. (c) Management of Termite by Integrated Approach and Indigenous Technologies. (d) Magnetic core-shell nano particles based extraction coupled with Gas/Liquid Chromatography – Tandem Mass Spectrometry for trace level analysis of pesticides. (e) Pesticide formulation from Plant Extract and their Bio-efficacy studies. (f) Evaluation, Efficacy Enhancement and Data Generation of Neem Based Pesticides & Fertilizers for Commercial Use.

Sponsored R & D Projects sanctioned by other funding agencies: (a) Development of recyclable catalytic systems based on nano-particles and nano-particulate assemblies for the treatment of toxic effluent generated from Indian pesticide industries (Sponsored by the OPCW). (b) Monitoring of Pesticide Residue in various crops (Sponsored by ICAR). (c) Development and evaluation of Nano-technology based pesticide formulations for impregnating in Military uniforms and paints (Sponsored by DRDO). In addition IPFT have 12 **Industry Sponsored Projects** from the Agrochemical Industries for Data generation on bio-efficacy and phytotoxicity studies (9) and for the development user and environment friendly pesticides formulations (3) during 2015 – 16.

2.23 IPFT Published 15 Papers in National / International Journals, presented 11 Papers in Conferences, 10 Talks/Lectures by IPFT Scientists , 5 Training Courses Attended by IPFT Scientists 10 training programme given by IPFT .

Assam Gas Cracker Project:

The Department of Chemicals & Petrochemicals has released the entire sanctioned amount of Capital Subsidy of Rs. 4690 crore, as follows:

Year	Capital Subsidy
2007-08	37.43
2008-09	100.00
2009-10	316.31
2010-11	808.83
2011-12	875.43
2012-13	1552.00
2013-14	1000.00
Total	4690.00

The Assam Gas Cracker Project (AGCP) has since been commissioned on 02.01.2016 and dedicated to nation by Hon'ble PM on 05.02.2016.

Departmental Schemes:

2.24 During 2016-17, an allocation of Rs. 5.00 crore and Rs. 1.00 crore has been made for the departmental schemes of CPDS and CWC respectively.

Chemical Promotion and Development Scheme (CPDS):

2.25 An allocation of Rs. 5.00 crore has been made for undertaking various promotional activities for chemical and petrochemical industry, viz:

- (i) Promotion of chemical industry by organizing **India Chem** and **India Chem Gujarat** events. These events are undertaken in association with FICCI once in two years alternately. During the year 2015-16, the Department along with FICCI, successfully promoted 3rd International exhibition 'Poly India 2016' on 28-30 January 2016 at Bombay Exhibition Centre, Goregaon, Mumbai. The Department also organized 7th International Conference on 'Advancement in Polymeric Materials APM-2016' at Ahmedabad, Gujarat on 11 – 12 February, 2016.

The Department will supplement the efforts of the industry associations for holding both domestic and international seminars/conferences etc. for the promotion and development of chemical as well as petrochemical sector. This will include road shows in countries with developed chemical industry as also those having good market potential for Indian industry. International Buyer-Seller Meet is also envisaged.

- (ii) Action will also be taken to promote PCPIRs. Promotional activities for the promotion of chemical/plastic hubs will also be undertaken.

Chemical Weapons Convention (CWC):

2.26 Inspection of chemical plant sites covered under the Convention is routinely conducted by the Organization for Prohibition of Chemical Weapons (OPCW) to ensure that the activities in scheduled and unscheduled chemicals are in accordance with the provisions of the Convention. India has so far received a total of two hundred six (206) industry inspections as on 15.12.2015.

CWC Help Desks

2.27 The Department has set up 6 Help Desks in PPP mode in association with the Indian Chemical Council (ICC) at various places covering geographical area as indicated below:

Location	Area to be covered
Vadodara	Gujarat.
Kolkata	West Bengal, Bihar, Jharkhand and North East Region
Mumbai	Maharashtra, Goa, Rajasthan Madhya Pradesh etc.
Chennai	Tamil Nadu, Kerala and Karnataka
Delhi	Uttar Pradesh, Himachal Pradesh, Haryana, Punjab, Uttrakhand, Jammu and Kashmir, Chandigarh and Delhi.
Hyderabad	Andhra Pradesh, Telangana, Orissa and Chhattisgarh

These Help Desks act as an important interface between Government and Chemical Industry covered under the convention for facilitating compliance with the obligations of the convention. As the treaty is prone to amendments from time to time and many new manufacturers/exporters are joining this segment of industry every day, the role of the Help Desks in their activity of outreaches crucial. The Help Desks undertake the following activities:

- i. Disseminate information on CWC and the obligations of the chemical industry, under the CWC Act.
- ii. Identification of new units, which are potential declarants, through industry surveys and facilitate their filing of declarations.
- iii. Assist the industrial units covered under the Convention in filing declarations as stipulated under the CWC Act.
- iv. Give due publicity to the Chemical Weapons Convention.
- v. Furnishing monthly reports to the Department on the activities conducted.
- vi. Conducting awareness programs. 20 awareness programs have been conducted during 2015-16 till 31.12.2015.

There is an allocation of Rs. 1.00 crore for CWC in 2016-17 for the above activities.

CHAPTER III

REFORM MEASURES AND POLICY INITIATIVES

Petroleum, Chemical Petrochemical Investment Regions (PCPIRs) :

3.1 The concept of Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs) is a cluster approach to promote the Petroleum, Chemical and Petrochemical sectors in an integrated and environmental friendly manner on a large scale. Government of India formulated the PCPIR policy in April 2007 to give a boost to this sector. This policy was an initiative to cater to the evolving needs of the industry. Such integrated PCPIRs were envisioned to reap the benefits of co-siting, networking and greater efficiencies through use of common infrastructure and support services.

3.2. The policy provides that each PCPIR would have a refinery / petrochemical feedstock company as an Anchor Tenant. Government of India will ensure availability of external physical infrastructure linkages to the PCPIR including connectivity through Railways, Roads, Ports, Airports and Telecom. This infrastructure is created or upgraded, through Public Private Partnership projects to the extent possible. The Central Government also provides necessary funding to make such projects viable, called Viability Gap Funding (VGF), as well as budget support for creation of these linkages.

3.3 The State Government concerned plays the lead role in setting up of the PCPIR. A nodal Department or agency is notified for coordinating the linkages. A management body constituted by the State Government for each PCPIR, under the relevant legislation, is responsible for the development and management of the PCPIR. A developer or a group of co-developers is selected through a transparent mechanism to manage the internal infrastructure of the PCPIR.

3.4 At present, PCPIRs are being set up in the four coastal States of Gujarat, Andhra Pradesh, Odisha and Tamil Nadu. PCPIR proposals of Andhra Pradesh and Gujarat were approved in February 2009, while proposals of Odisha and Tamil Nadu were approved in December 2010 and July 2012 respectively. The latest MoA has been signed with the Government of Tamil Nadu on 20th February, 2014.

3.5 The status of implementation and execution of these projects is as follows:

Indicator	Gujarat	Andhra Pradesh	Odisha	Tamil Nadu
Location/ Region	Dahej, Bharuch	Vishakhapatnam – Kakinada	Paradeep	Cuddalore-Nagapattinam
Date of Approval	Feb, 2009	Feb, 2009	Dec, 2010	July,2012
Date of MoA	07.01.2010	01.10.2009	03.11.2011	20.02.2014
Total Area (Sq. kms.)	453.00	603.58	284.15	256.83

Indicator	Gujarat	Andhra Pradesh	Odisha	Tamil Nadu
Processing Area (Sq.kms.)	248.00	270.00	123.00	104.00
Anchor Tenant	ONGC Petroleum addition Limited	Hindustan Petroleum Corporation Ltd. (HPCL)	Indian Oil Corporation Ltd. (IOCL)	Nagarjuna Oil Corporation Ltd. (NOCL)
Refinery / Cracker capacity in MMTPA	Cracker: Ethylene: 1.1 Propylene: 0.6	9.3 to 15 (expansion of existing refinery) 15 (Greenfield).	15 (Greenfield refinery).	12 (Refinery)
Anchor Project Status	Expected Commissioning: June, 2016	Anchor Tenant for Greenfield project yet to come on board.	Dedicated to nation by Prime Minister on 7.2.2016	Construction work, stalled since 2011, yet to restart.
Total amount of infrastructure projects approved (Rs. crore)*	15436	18731	13634.00	13354.00
Gol share in form of VGF (Rs. crore)*	80.50	1206.80	716.00	1143.00 1500 .00 (budgetary support)
Proposed Investment (Rs. Crore)*	50,000	3,43,000	2,78,000	92,000
Investment made (Rs. Crore)	70,500	37,000	45,000	8100
Projected employment (number)*	8,00,000	11,98,000	6,50,000	737000
Employment generated (number)	78,000	93,500	38,000	14,000
Status of Master Planning notification	Development Plan sanctioned in 2012	Revised Draft final Master Plan in process.	Preparation of Master Plan is in process.	To be taken up after formation of Management Board.
Status of EIA	Draft final EIA submitted to MoEF.	EMP / EIA study submitted to APPCB for Public hearing.	Hiring of Consultant is under process.	To be taken up after formation of Management Board.

* At approval stage of the projects.

CHAPTER IV

REVIEW OF PAST PERFORMANCE

Status of Implementation of PCPIRs as on 31.12.2015

4.1 Schemes of the Department are broadly categorized into three groups viz. (i) Assistance to Public Sector Undertakings for their technological upgradation and product diversification projects; (ii) Assistance to autonomous academic and research institutions viz. CIPET and IPFT for skill development and research activities; (iii) Departmental promotional/awareness schemes of Chemical Weapons Convention (CWC); Chemical Promotion and Development Scheme (CPDS), IT/Secretariat etc. Establishment of Assam Gas Cracker Project at Lepetkata in the Dibrugarh district of Assam is an important scheme being implemented by the Department since 2007-08.

4.2 Scheme-wise review and achievements during the 2014-15 and 2015-16 are as follows:

Gujarat PCPIR:

The Cabinet Committee on Economic Affairs (CCEA) approval for setting up of PCPIR in Dahej, Gujarat was accorded in February, 2009. Memorandum of Agreement (MoA) was signed between Department of Chemicals and Petrochemicals, Government of India (GoI) and Government of Gujarat in January 2010 to implement the PCPIR.

- A PCPIR Regional Development Authority was constituted under the Special Industrial Regions Act.
- Draft Development Plan / Master Plan has been sanctioned by the State Government in 2012 and at present 2 Town Planning (TP) schemes are under implementation.
- The Gujarat Infrastructure Development Corporation (GIDC) has spent Rs. 10,994 crore for provision of infrastructure in the PCPIR.
- Additional expenditure of Rs. 12,000 crore by State Government is under way on infrastructure development like road, ports, water supply etc.
- Dahej-Bharuch State Highway to be connected to Delhi-Mumbai National Highway and National Expressway. Extension of Ahmedabad–Vadodara National Expressway to Mumbai is also proposed.
- Rail connectivity and cargo transportation is available with Delhi-Mumbai Dedicated Freight Corridor (DFC).

- The Anchor Tenant, viz. M/s ONGC Petro addition Ltd. (OPaL), has invested around Rs. 22,000 crore.
- Final Environmental Impact Assessment (EIA) report, based on the final Terms of Reference (ToR) for the EIA approved by Expert Appraisal Committee (EAC), has been finalized by NEERI, Nagpur and has been uploaded on the website of Ministry of Environment and Forests on 7th September, 2015 after public hearing and approval of Gujarat State Pollution Control Board. Required details have been sought to get recommendation from Gujarat Coastal Zone Management Authority.
- An independent evaluation of the implementation of Gujarat PCPIR has been carried out in order to review the progress of these projects and draw future course of action.

Andhra Pradesh PCPIR:

Setting up of PCPIR in Andhra Pradesh was approved in February, 2009 and a Memorandum of Agreement (MoA) was signed between Government of Andhra Pradesh and Department of Chemicals and Petrochemicals, Government of India on 1st October, 2009. Special Development Authority (SDA) was formed by Govt. of A.P. in May 2008 to implement the PCPIR.

- Detailed Master Planning has been published in August 2013 and the objections received were being addressed.
- VK-PCPIR SDA has engaged Environment Protection Training and Research Institute (EPTRI), Hyderabad to carry out Terrestrial Environmental Impact Assessment, Marine Environmental Impact Assessment studies entrusted to M/s Indomer Coastal Hydraulics. CRZ & CZMP studies entrusted to CSIR-NIO, Goa. Consolidated report prepared by EPTRI and draft EIA report have been submitted to APPCB on 03.11.2014. Public hearing has to be taken up by APPCB through District Authorities of two Districts Visakhapatnam and Kakinada.
- AP PCPIR covers 6 existing SEZs. The units have already made investments of Rs. 34,336 crore appx. Rs. 1850 crore have been invested on infrastructure development.
- As part of the project, Government of India had approved financial support (Viability Gap Funding or VGF) of Rs. 1206.80 crore for infrastructure projects in PPP mode, which is being revised based on the latest assessments of project requirements. The State Government has initiated the work on preparation of Detailed Project Reports (DPRs) for approval of Government of India on revised funding requirements.
- Hindustan Petroleum Corporation Limited (HPCL), identified as Anchor Tenant, proposed an investment of about Rs. 50,000 crore in VK PCPIR for expansion of existing refinery from 9.3 MMTPA to 15 MMTPA and setting up a greenfield refinery-cum-petrochemical complex of 15 MMPTA capacity. HPCL is still looking

for partners and therefore anchor tenant is yet to come on board in effective terms.

- Road, rail link, water supply, effluent treatment and marine outfall projects are under different stages from study to implementation.

Odisha PCPIR:

The Odisha PCPIR was approved by CCEA in December, 2010 and MoA was signed between Government of India and Government of Odisha in November, 2011.

- A Special Purpose Vehicle named the Paradeep Investment Region Development Ltd has been formed to implement the project.
- The preliminary Master plan for the region was prepared by IL&FS and L&T Ramboll. However for the Industrial development Area of PCPIR the detailed Master Plan shall be prepared by PCPIR Authority. IDCO is in the process of selecting a reputed consultant for preparation of the Master Plan of the region.
- Preparation of Detailed Project Report (DPR) is underway for development of road infrastructure, and will be finalized after Master Plan.
- Anchor Tenant viz. Indian Oil Corporation Limited (IOCL) has invested Rs. 32,018 crore (including contract awarded and committed) to set up 15 MMTPA refinery and a Polypropylene Unit.
- A 1320 MW thermal power plant by SPI Ports (P) Ltd is approved by High Level Clearing Authority (HLCA).
- Surat – Paradeep Gas Transmission Pipeline, an inter-State Gas transmission pipeline, is being implemented by GAIL.
- Preliminary Environmental Assessment Study has been undertaken by IDCO. For detailed EIA & EMP, IDCO is in discussion with Environmental Protection Training and Research Institute (EPTRI), Hyderabad for conducting EIA and preparation of Environmental Management Plan.
- IDCO is developing a Plastic Park at Paradeep under the Plastic Parks scheme of Department of Chemicals & Petrochemicals, Government of India. Final approval of Government of India has been conveyed.
- Bidding process is in progress for contracting out Solid Waste Treatment & Disposal functions.

Tamil Nadu PCPIR:

Tamil Nadu PCPIR was approved by CCEA in July 2012 and a Memorandum of Agreement (MoA) was signed between Government of India and Government of

Tamil Nadu State on 20th February, 2014 specifying the project details, financing patterns and responsibilities of the parties.

- State Government has to notify the PCPIR form PCPIR Management Board, which are long due. Thereafter Master Planning and EIA activities will be taken up.
- The Anchor Tenant, Nagarjuna Oil Corporation Limited (NOCL), has invested Rs. 7,430 crore in its refinery project.
- The date of commissioning of the first phase of the project is now extended, mostly due to financial constraints. The capacity of the project is being increased from 6 MMTPA to 12 MMTPA with a corresponding increase in cost to Rs. 18,503 crore.
- A product jetty for evacuation of petroleum fuels and a Single Point Mooring system for receiving crude are under construction and 51% overall progress has been achieved.

Public Sector Undertakings:

4.3 Hindustan Organic Chemicals Limited (HOCL): Due to continued losses leading to negative net worth of HOCL by 2003-04, a rehabilitation package for the company was approved by the Government and implemented during 2006-07. The outlay for rehabilitation was Rs.250 crore. HOCL earned profits during 2006-07 and 2007-08 and came out of Board for Industrial and Financial Construction (BIFR) but again suffered losses during 2008-09 and 2009-10 mainly due to recessionary trend in the market as an effect of global meltdown. Though it earned profit during 2010-11, the situation worsened thereafter with losses during 2011-12 and 2012-13 following withdrawal of anti-dumping duties on its main products Phenol and Acetone. The company has been incurring continuous losses since 2011-12 and had an accumulated loss of Rs.927.55 crore as on 31.03.2015. With the company's net worth becoming negative as on 31.3.2013, it had filed a reference with BIFR for registration as a sick company under the Sick Industrial Companies Act, 1985. BIFR on 22.7.2015 declared HOCL as a sick company. HOCL was not provided any Plan loan in 2014-15.

4.4 Hindustan Insecticides Limited (HIL): The revival proposal of HIL was also approved by the Government in July 2006 which included waiver of loans, writing off outstanding interest and conversion of loans into equity. After implementation of the revival package, HIL has been continuously earning profits for the last 9 years. To improve its profitability and strengthen the company's position, HIL has diversified into agrochemicals and seed business. HIL made a profit of Rs.1.58 crore in 2010-11, Rs.1.60 crore in 2011-12, Rs.2.92 crore in 2012-13, Rs.1.84 crore in 2013-14 and Rs.1.60 crore in 2014-15. HIL was provided Plan loan of Rs.15 crore in 2014-15.

4.5 Hindustan Fluorocarbons Limited (HFL): Rehabilitation package for HFL, under the operating agency M/s IDBI, was approved by BIFR on 03.12.2007 and its implementation is completed. After implementation of the rehabilitation package, the company made profits of Rs.3.06 crore in 2009-10, Rs.2.23 crore in 2010-11,

Rs. 2.52 crore in 2011-12 and Rs.94.88 lakh in 2012-13. However, the company suffered loss of Rs.24.82 crore in 2013-14 and of Rs.3.77 crore in 2014-15 mainly on account of provisioning for wage arrears of 1997 and 2007 and reduction in sales realisation. Due to net worth of the company remaining negative, it continues to be a sick company under BIFR. HFL was provided Plan loan of Rs.16.80 crore in 2014-15.

Autonomous Institutes:

Central Institute of Plastics Engineering and Technology (CIPET):

4.6 11494 students were enrolled for the long term programmes in the year 2013-14, which has increased to 12629 students in 2014-15 which is around 10% more than the previous year. In short term courses CIPET has trained 28,498 in the year 2013-14 and 30281 in the year 2014-15 through various Skill Development Training Programme. CIPET has a target to train around 6.20 lakh persons during 2011-22, as part of the National Skill Development initiative. **As on 31.01.2016, CIPET has trained 48162 persons under Skill Development Training Programme** through long- term and short-term training programme **against the** committed target of 80000 participant for 2015-16.

Institute of Pesticide Formulation Technology (IPFT):

4.7 IPFT generated a revenue of Rs. 92.45 lakhs from the industry sponsored projects and testing of pesticides samples during 2015-16.

Departmental Schemes:

Chemical Promotion and Development Scheme (CPDS):

4.8 There was an allocation of Rs. 3.90 crore for these activities and an amount of **Rs. 1.83 crore till 31.12.2015** was spent by way of financial support for conducting seminars, conferences, workshops, training, studies and exhibitions on various aspects of chemical and petrochemical sectors in 2015-16.

Chemical Weapons Convention (CWC):

4.9 There was an allocation of Rs. 1.00 crore for this scheme and an amount of **Rs. 1.00 crore was utilized till 31.12.2015**. During the calendar year 2015, a total of 25 number of industry inspections were hosted successfully by DCPC. 20 CWC awareness programs were conducted during 2015-16 till 31st December, 2015.

Other New schemes of Petrochemicals

4.10 For implementing the policy measures envisaged in the National Policy on Petrochemicals, many feasibility studies were undertaken in various areas in petrochemical sector. Based on the recommendations of the feasibility studies, Government formulated three schemes viz. (i) National Awards for Technology Innovation in various fields of Petrochemicals and downstream Plastic Processing Industry; (ii) Setting up Centres of Excellence (CoEs) in the field of Petrochemicals; and (iii) Setting up Plastic Parks; which are in the process of implementation.

i. National Awards for Technology Innovation :

4.11 The Department is implementing an Award Scheme to provide incentive for meritorious innovations & inventions in various fields of petrochemicals and downstream plastics processing industry. The Scheme is aimed at motivating inventors to carry out innovative research leading to development of new innovative products, increase in product life cycle, setting of quality standards, better plastic waste management, better energy conservation etc. Central Institute of Plastic Engineering and Technology (CIPET) is entrusted with the task of seeking and short listing nominations for the scheme. The Department has been providing a grant-in-aid of Rs. 1 crore (approx.) to CIPET each year for administering the award scheme. The National Awards for Technology Innovation are given in eight categories for innovation in areas such as Polymeric Materials, Polymeric Products, Polymer Waste Management and Recycling Technology and related areas. There are three sub-categories of Awards in each category, covering (i) individual/ team (ii) industry, and (iii) R&D institutions. The award money for each category is Rs. 2 lakh.

4.12 For the 6th National Award for Technology Innovation in 2015-16, 264 nominations were received by CIPET for the eight categories and three sub-categories of the scheme. The Expert Committee, constituted for screening and evaluation of the nominations, shortlisted the nominations after due scrutiny, which were further evaluated by the Prize Award Committee in a meeting held on 22nd December, 2015 for making final recommendations for the awardees, for consideration and approval of the competent authority.

4.13 National awards given so far are as follows:

Numbers of National Awards

SI. No.	Year	Winners	Runners up
1	2010-11	09	NIL
2	2011-12	15	10
3	2012-13	11	08
4	2013-14	17	06
5	2014-15	16	14
6	2015-16	17	14

ii Centres of Excellence (CoE) in Polymer Technology

4.14 The scheme aims at improving the existing petrochemicals technology and research in the country and to promote development of new applications of polymers and plastics. The Department has set up five Centres of Excellence (CoE) within the premises of reputed educational/research institutes:-

- (i) National Chemicals Laboratory (NCL), Pune – CoE for Sustainable Polymer Industry through Research, Innovation & Training (CoE-SPIRIT);
- (ii) Central Institute of Plastics Engineering & Technology (CIPET), Chennai – CoE for Green Transportation Network (GREET),
- (iii) IIT, Delhi – CoE for Advanced Polymeric Materials,
- (iv) CIPET, Bhubaneswar- CoE for Sustainable Green Materials and
- (v) IIT, Guwahati – CoE for Sustainable Polymers.

The CoE at Pune and CoE at CIPET, Chennai were approved during the 11th Five Year Plan and the remaining three CoEs were approved during the 12th Five Year Plan.

4.15 The assets created under CoE-SPIRIT at NCL, Pune have not only resulted in a boost to contemporary research in Polymer science, but also contributed to the training of several members of polymer industry and academia. In case of CoE- GREET at CIPET, Chennai and CoE on Sustainable Green Materials at CIPET, Bhubaneswar, the outputs are in terms of promoting academic, research and educational excellence through partnership between CIPET, India and University of Toronto, Canada and Michigan State University, USA. At IIT, Delhi and IIT, Guwahati, the resources and capabilities are being strengthened for furthering research activities in Advanced Polymeric Materials and Sustainable Polymers, respectively.

4.16 Government of India provides financial support to the extent of maximum of 50% of total cost of the project subject to an upper limit of Rs. 6 crore over a period of three years. The Gol grant of Rs. 6 crore has been released to the CoEs at Pune, Chennai and Bhubaneswar. In 2015-16, based on the recommendations of the Expert Committee, constituted to review the physical and financial performance of the selected CoEs, the 3rd installment of Rs. 2 crore has been released to IIT, Guwahati.

III. Plastic Parks

4.17 The scheme aims at setting up of need based plastic parks, an ecosystem with state-of-the-art infrastructure and enabling common facilities through cluster development approach, to consolidate and synergize the capacities of the domestic downstream Plastic Processing Industry. The larger objective of the scheme is to contribute to the economy by increasing investment, production, export in the sector and also generation of employment.

4.18 Under the scheme, Government of India provides grant funding up to 50% of the project cost, subject to a ceiling of Rs. 40 crore per project. The remaining project cost is funded by the State Government or State Industrial Development Corporation or similar agencies of State Government, beneficiary industries and loan from financial institutions.

4.19 The Scheme Steering Committee (SSC) had earlier accorded approval to the proposals for establishment of plastic parks received from States of Madhya Pradesh, Odisha and Assam. The Department had released the first installment of Rs.8 crore of the Grant in Aid in the year 2013-14 to the Special Purpose Vehicles (SPV)/ Key Promoters for setting up plastic parks at Madhya Pradesh, Odisha and

Assam. The second installment of Rs. 14 crore of the Grant in Aid has also been released for Assam Plastic Park in 2015. Following the submission of the Detailed Project Report (DPR) by the State Govt. of Tamil Nadu, the SSC has accorded approval on 30.10.2015 for establishment of a Plastic Park in Tamil Nadu.

4.20 The Department, with the approval of the competent authority, had moved a proposal to seek additional funding for setting up of 10 plastic parks, including current four plastic parks (approved by SSC) and six additional parks for implementation during 12th and 13th Plan period. Further, considering additional demand being received from various States, the Hon'ble Minister (C&F) has given 'in-principle' approval for setting up 8 more Plastic Parks in September, 2015 (which are in addition to 10 Parks already approved). The initiative is expected to boost not only 'Make in India' Programme but also generate huge employment.

CHAPTER V

FINANCIAL REVIEW

5.1 The scheme wise outlays and expenditure for 2014-15 (expenditure), 2015-16 (BE, RE and expenditure) and 2016-17 (BE) are given in the Table below:

Table No. - 9

(Rs. crore)

Sl.No.	Name of the Scheme	2014-15	2015 - 16			2016 - 17
		Exp.	BE	RE	Exp. upto 12.02.2016	BE
I.	Project Based Support to PSUs	31.80	32.00	15.00	0.00	40.00
1.1	Hindustan Organic Chemicals Ltd.(HOCL)	0.00	17.00	0.00	0.00	25.00
1.2	Hindustan Insecticides Ltd. (HIL)	15.00	10.00	10.00	0.00	15.00
1.3	Hindustan Fluorocarbons Ltd.(HFL)	16.80	5.00	5.00	0.00	0.00
II.	Project Based Support to Autonomous Bodies	102.53	93.68	108.68	108.68	65.99
2.1	Central Institute of Plastic Engineering & Technology (CIPET)	100.85	92.68	107.68	107.68	57.67
2.2	Institute of Pesticides Formulation Technology (IPFT)	1.68	1.00	1.00	1.00	8.32
III.	Other Ongoing Schemes	17.05	62.32	18.21	8.16	54.01
3.1	Assam Gas Cracker Project (AGCP)	0.00	0.01	0.01	0.00	0.01
3.2	Chemical Promotion & Development Scheme (CPDS)	3.53	1.90	3.90	2.52	5.00
3.3	Chemical Weapons Convention (CWC)	0.87	1.00	1.00	1.00	1.00
3.4	IT/Secretariat	0.48	1.00	0.80	0.49	0.00
3.5	Other New Schemes of Petrochemicals	12.17	58.41	12.50	8.84	48.00
	Total	151.38	188.00	141.89	121.53	160.00

CHAPTER VI

REVIEW OF PERFORMANCE OF PUBLIC SECTOR UNDERTAKINGS AND AUTONOMOUS INSTITUTIONS

Public Sector Undertakings:

6.1 This Department has three Public Sector Undertakings in the chemical sector viz. Hindustan Organic Chemicals Ltd. (HOCL), Hindustan Fluorocarbons Limited (HFL), a subsidiary of HOCL, and Hindustan Insecticides Ltd. (HIL) and one in the Petrochemicals Sector, namely, M/s Brahmaputra Crackers and Polymers Ltd. (Assam Gas Crackers Project).

Hindustan Organic Chemicals Limited (HOCL)

6.2 HOCL incurred losses for the first time in 1997-1998, and thereafter continued with negative results till 2014-15 except for some intermittent profits during 2004-05, 2006-07 and 2007-08 and 2010-11. In the five year period 2008-09 to 2012-13, the company had average annual turnover of more than Rs.600 crore. However, the continuous cash losses since 2011-12 resulted in erosion of working capital and deterioration in the operations of the company, including stoppage of process plants for long periods. The recent global fall in the prices of petroleum products has caused severe crash in the prices of HOCL's main products Phenol and Acetone which has further adversely affected the financials of the company. Consequently, the turnover has reduced drastically from Rs.624.19 crore in 2012-13 to Rs.150.13 crore in 2014-15 and the loss has increased from Rs.137.99 crore to Rs.215.49 crore in the same period. The company has been facing acute shortage of working capital leading to frequent shutting down of operations / plants at both Kochi and Rasayani units thereby further aggravating the financial crisis of the company.

6.3 Financial performance of HOCL in terms of turnover and net profit / loss for the last 5 years and net worth as on 31.3.2015 are given below:

(Rs. in crore)

Year	Turnover	Net Profit / (Loss)
2010-11	738.04	25.72
2011-12	606.37	(78.07)
2012-13	624.19	(137.99)
2013-14	236.80	(176.85)
2014-15	167.19	(215.49)
Net worth as on 31.3.2015: (-)Rs.534.16 crore		

6.4. During 2015-16 (up to December, 2015), the company achieved a turnover of Rs.97.39 crore and loss of Rs.133.70 crore, as per the provisional unaudited results. The low turnover and loss is due to the fact that most of the plants / operations of the company have generally remained shut down for several months due to shortage of working capital.

Hindustan Fluorocarbons Limited (HFL)

6.5 A rehabilitation package for HFL under the operating agency M/s IDBI was approved by BIFR on 03.12.2007. Total cost of rehabilitation package was Rs.19.28 crore and did not involve infusion of any Govt. funds. Following implementation of the rehabilitation package, HFL made marginal profits from 2007-08 to 2012-13. However, the company suffered losses in 2013-14 (Rs.24.82 crore) and in 2014-15 (Rs.3.77 crore) mainly on account of provisioning for wage arrears and due to reduced sales realization of its main product PTFE.

6.6 For revival and growth of HFL, the company has diversified into profitable business of fluoro specialty chemicals (which has higher profit margins than the existing grades of PTFE) and adopted the strategy of switching over from single product to multi product facility to reduce dependency on PTFE. It has developed superior grades of PTFE (modified PTFE or MPTFE) and started exporting the same. HFL has also developed fluoro specialty chemicals like TFE-Ether and has completed successful trials for development of other fluorospeciality chemicals like Telomers. Revenue generation from these products are expected to help HFL to turnaround and earn profits in the near future.

6.7 Financial performance of HFL in terms of turnover and net profit/loss for the last 5 years and net worth as on 31.3.2015 are given below:

(Rs. in crore)		
Year	Turnover	Net profit / (Loss)
2010-11	33.52	2.23
2011-12	50.33	2.52
2012-13	44.48	0.95
2013-14	31.34	(-)24.82
2014-15	32.75	(-)3.77
	Net worth as on 31.3.2015: (-)Rs.52.55 crore	

6.8 During 2015-16 (up to December, 2015), the company has achieved a turnover of Rs.25.40 crore and loss of Rs.7.00 crore, as per the provisional unaudited results. This is mainly due to plant shut down for refurbishment / revamping activities.

Hindustan Insecticides Limited (HIL)

6.9 HIL is the sole supplier of DDT to the National Vector Borne Disease Control Programme (NVBDCP) of the Ministry of Health and Family Welfare, Govt. of India. The company also exports DDT to some African countries. DDT accounts for almost 50 % of the turnover of the company.

6.10 HIL diversified into agrochemicals in the late 1970s to ensure supply of quality pesticides at reasonable prices to the agricultural sector. Today it has a range of technical and formulation grade pesticides to meet the varied requirements of the farming community. To further consolidate its position, HIL in the year 2012-13 ventured into the seed production and marketing business. The company has been

recognized as a nodal agency by Ministry of Agriculture & Farmers Welfare for production and marketing of certified seeds for crops and vegetables. The company is participating in Seed Minikit Programme of Ministry of Agriculture & Farmers Welfare to popularize the latest high yielding varieties among the farmers.

6.11 HIL has also identified a new thrust area of fertilizers business. It has been recently inducted by the Department of Fertilizers as an agency to import fertilizers. Further, Bathinda plant of the company is planned to be utilized for producing water soluble fertilizers. This diversification will enable the company to become a one stop shop for the farming community by providing all the three critical agricultural inputs viz. seeds, pesticides and fertilizers.

6.12 The company has been continuously posting profits since the last 10 years. Financial performance in terms of turnover and net profit / loss for the last 5 years and net worth as on 31.3.2015 are given below:

(Rs. in crore)		
Year	Turnover	Net Profit / (Loss)
2010-11	271.04	1.58
2011-12	279.82	1.60
2012-13	301.11	2.92
2013-14	330.35	1.84
2014-15	339.90	1.60
Net worth as on 31.3.2015: Rs.92.56 crore		

6.13 During 2015-16 (up to December, 2015), the company has achieved a turnover of Rs.132.78 crore and net profit of Rs.0.25 crore, as per the provisional unaudited results.

6.14 HIL achieved exports of Rs.26.99 crore in 2014-15 as against exports of Rs.8.73 crore during 2013-14. The company exported DDT to African countries likely Zimbabwe, Mozambique, South Africa etc. for the malaria control programme in these countries. It exported agrochemicals to countries like Mexico, Costa Rica, Russia, Peru, Israel, Spain and Myanmar.

6.15 M/s Brahmaputra Crackers and Polymers Ltd. (Assam Gas Crackers Project)

The Department of Chemicals & Petrochemicals has released the entire sanctioned amount of Capital Subsidy of Rs. 4690 crore, as follows:

(Rs. crore)	
Year	Capital Subsidy
2007-08	37.43
2008-09	100.00
2009-10	316.31
2010-11	808.83
2011-12	875.43
2012-13	1552.00
2013-14	1000.00
Total	4690.00

The Assam Gas Cracker Project (AGCP) has since been commissioned on 02.01.2016 and dedicated to the nation by Hon'ble PM on 05.02.2016.

Autonomous Institutions/ Organisations:

Central Institute of Plastics Engineering & Technology (CIPET):

6.16 CIPET's objectives are training of manpower in different disciplines of plastics engineering and technology, provision of technical support/consultancy services to the plastic and allied industries and research. The institute also undertakes State Government sponsored training programmes in specific areas for the benefit of SC/ST candidates, women entrepreneurs and rural small scale entrepreneurs. CIPET conducts 13 different long term training programs viz. Diploma, Post Diploma, Post Graduate Diploma, Undergraduate, Post Graduate and Ph.D. During the 11th Five Year Plan, CIPET trained 116,638 students through various long term and short term skill development programmes. The target for 12th Five Year Plan is to train around 2.2 lakh students.

Institute of Pesticides Formulation Technology (IPFT):

6.17 The Institute is engaged in the development of formulation of environment friendly pesticides and plays a catalytic role in the growth of pesticides industry. An amount of Rs. 8.32 crore has been allocated to the Institute for 2016-17 BE(Plan) for meeting the requirement of funds for upgradation of existing assets and provision of new infrastructure under capital support, completion of ongoing R&D projects for technology development of new generation formulations as also bioscience and analytical projects.

IPFT generated revenue of Rs.92.45 lakhs during 2015-16.

ANNEXURE-I

Statement of Outlays & Outcomes/Targets 2016-17

(Rs. in crores)

S. No.	Name of Scheme/ Programmes	Objective/ Outcome	Outlay 2016-17			Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
			4(i)	4(ii)	4(iii)				
1	2	3	Non-Plan Budget	Plan Budget (Rs.in crores)	Complementary Extra-Budgetary Resources	5	6	7	8
1.	Assam Gas Cracker Project (AGCP)		0.01*	0.01*					
(1)	Assam Gas Cracker Project (AGCP)	To produce 2,20,000 TPA each of Ethylene & LLDPE/HDPE and 60,000 TPA polypropylene at a total revised project cost of Rs.8920 cr. The commissioning of the project is targeted by	0.01*	0.01*		The commissioning of project would lead to investments in setting up of downstream plastic processing industries and give rise to substantial employment in the region.		All units, except Unit at Lepetkata and C2+ recovery have been commissioned as on 3.12.2015. The Commissioning of the project is scheduled by December,	The Govt. of India's contribution to the project, as per Revised Cost Estimates – I (approved by CCEA in Nov., 2011) is in the form of capital subsidy of Rs.4690 crore against project cost of Rs. 8920 crore. The entire presently approved capital subsidy of Rs.4690 crore has been released to BCPL till 2013-14. However, BCPL has proposed the revised project

		December, 2015.						2015.	<p>cost of Rs. 9,965 crore as against the approved project cost of Rs.8,920 crore. The revised project cost has been estimated based on timelines for overall commissioning by December, 2015. The estimated increase in project cost of Rs. 1045 crore is proposed to be funded by capital subsidy of Rs. 549.45 crore, equity of Rs. 148.67 crore and debt of Rs. 346.88 crore.</p> <p>Accordingly, the capital subsidy of Rs.549.45 crore has been indicated in the Annual Plan 2016-17 (Proposed)</p> <p>subject to approval of Revised Cost Estimates-II by the Government.</p>
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2.	Autonomous Bodies and Public Undertakings			105.99				
A.	Autonomous Institutions			65.99				
(1)	Central Institute of Plastics Engineering & Technology (CIPET)							
(i)	Plan grants-in-aid assistance to CIPET	i) Enhancing the Capabilities in Academic Activities and Skill Development Training Programs at CIPET Centres.		57.67	<ul style="list-style-type: none"> Construction of hostel facilities for 4070 boys and 996 girls 2016-17 Furnishing of hostels for 7384 students at 10 centers. The Vocational Training Centre will impart skill development training to about 1800 unemployed youths in 3 years through specially designed courses w.e.f. 2015-16 Employment/self-employment for at least 70% of the successfully trainees. 556 students will be trained in courses like M.Sc., M/Tech., B.Tech. & B.E. 	<p>To construct hostel facilities at ten states with furnishing facilities.</p> <p>To construct Academic block building for VTC .</p> <p>To procure equipment / machineries for HLC / VTC</p> <p>To meet recurring expenditure</p>	<p>For hostel- Allocation of funds. Release of funds. Award of tender. Commencement of work by the contractor. Completion of work and handing over of the facilities to CIPET. Expected to be completed by Oct., 2017</p> <p>For - VTC Allocation of funds from Gol Release of funds to CIPET. Allocation of land by State Govt. for the center. Transfer of land to</p>	<p>Construction of hostels/ buildings by NBCC / CPWD.</p> <p>Receipt of matching amount from the State Govt. for setting up of center.</p> <p>Allocation of land by the State Govt. for the center.</p>

								<p>CIPET.</p> <p>Receipt of funds from State Govt.</p> <p>Construction of academic facilities for the center.</p> <p>Expected to be completed by March, 2019.</p>	
		<p>ii) Enhancing the Capabilities in Research activities at two R & D Centres and Technology Support Services at CIPET Centres</p>				<ul style="list-style-type: none"> • Development of Asbestos-free Roofing. • Waste Management: Value Addition and Recycling Strategies for E-Waste & Auto Waste. • Light Weight Honeycomb structures for Defence Applications. • Energy Security – Fuel Cells, Solar cells: Solutions for a Sustainable Energy Source. • Coatings & Adhesives: Coupling Bio-Origin & High Performance for Naval Applications. • Flexi-polymer electronics (biosensors): an innovative health-care technology. • Biodegradable materials for packaging perishable 	<p>Creation of Laboratory facilities for existing R&D Unit Advanced Research School for Technology & Product Simulation (ARSTPS), functioning at Chennai</p> <p>Creation of Laboratory facilities for existing R&D Unit Laboratory for Advanced Research in Polymeric Materials (LARPM) at Bhubaneswar.</p> <p>To procure Machinery / Equipment for enriching Technology Support</p>	<p>Allocation of funds from Gol</p> <p>Release of funds to CIPET.</p> <p>Award of sponsored projects.</p> <p>Tendering for procurement of machineries.</p> <p>Award of tender.</p> <p>Supply of machineries from supplier.</p> <p>Intergration/installation of machineries.</p> <p>Expected to be completed by 31st March, 2017</p>	<p>Outcome of research cannot be certain.</p> <p>Timely supply of machines from the supplier.</p>

					<p>goods.</p> <ul style="list-style-type: none"> • Design and development of medical monitoring systems and products using 3D printing technique. • Technology development for fabrication of high quality micro fluidic devices. • Finite element analysis and simulation of marine and aerospace products under extreme weather conditions. • Prototyping of high fatigue adhesively bonded GFRP Composites Joint. • Taking up 32 sponsored projects industrial consultancy. • Development five new materials. • Filing 2 Patents & Designs. • Publication of 40 research papers. • 2 Research Collaborations. • Procurement of tooling machineries. • Procurement of CAD/CAM/CAE Software. 	<p>Services facilities and capabilities to meet industry needs.</p> <p>To establish Video Conference facility with conference room, interaction hall, project consultancy cell, HR cell and International Exhibition / Seminar cell with facilities at PDS-Gurgaon .</p>		
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						<ul style="list-style-type: none"> Procurement of Processing machineries. 			
						Procurement of testing equipments			
(2)	Institute of Pesticides Formulation Technology (IPFT)	Promote advancement of pesticides formulation technology	0.01*	8.32	-	Up-gradation of existing assets and provision of new infrastructure under Capital Support completion of ongoing R&D projects for technology development of new generation pesticide formulation as also bioscience and analytical projects.			Upgradation of existing equipment along with addition of new equipment after following due process for justification and evaluation.
B.	Public Sector Undertakings		0.03	40.00					
(1)	HOCL	Plant & Machinery upgradation of Chemical PSUs	0.01*	25.00					Plan budgetary support indicated in Col.4 (ii) are indicative amounts and their actual release in 2016-17 will depend on the techno-economic feasibility and appraisal of the projects / schemes proposals submitted by the PSUs. Accordingly, quantifiable deliverables and process timelines
(2)	HIL		0.01*	15.00					
(3)	HFL		0.01*	0.00					

									can be determined only after the projects / schemes to be implemented in 2016-17 are finalized and approved by the competent authority.
3.	Promotion of Chemical Industry		0.01	6.00					
(1)	Chemical Promotion and Development Scheme (CPDS)	Measures for promoting Indian Chemical Industry and for initiating new activities under National Chemical Policy-2015		5.00		New initiatives undertaken under NCP such as Chemical inventorization Committee/ Board, Bureau of Corrosion of Control, Chemical Safety Committee/Board etc. (i) India Chem 2016 (ii) Speciality Chemicals Conclave (iii) Other Chemical and Petrochemical events/ workshops (iv) construction chemicals (v) green chemistry, (vi) Rotterdam Convention (vii) Stockholm Convention (viii) Chemical Safety and Security Rating (ix) Health, Safety, Security and Environment. (x) Agrochemicals (xi) Anti-corrosion (xii) Responsible Care			

2.	Chemical Weapons Convention	Compliance of CWC Convention by Indian Chemical Industry	0.01*	1.00		20 (twenty) Awareness Workshops on CWC and continuation of six CWC Help Desks.		20 (twenty) Awareness programmes have been planned to be held at various locations across the country. The CWC Help Desks established by Indian Chemical Council in PPP mode at various locations are being supported by Govt. of India.	
4..	Promotion of Petrochemical Industry			48.00					
(i)	Scheme of National Awards for Technology Innovations in Petrochemicals and downstream Plastic Processing Industry	Incentivizing meritorious innovations by individuals and institutions in various fields of petrochemicals and downstream plastic processing industry.		1.00		To select meritorious innovations and inventions in 8 categories and 3 sub-categories, in fields of polymer materials/ products, processing, machinery, recycling/ waste management etc. The scheme aims to motivate inventors to carry out innovative research leading to development of new innovative products, increase in product life cycle, setting of quality standards, better plastic waste management, better energy conservation etc.		The applications for the National Award for 2016-17 will be called for in due course during 2016 by CIPET. Thereafter, Expert Committee and Prize Award Committee will be constituted for scrutiny and evaluation of the nominations received and the final nominations made by the Committee will be submitted for	Rs. 1 crore has been proposed for allocation for implementation of the 7 th National Awards for 2016-17.

								approval of the Secretary (C&PC). The grant amount of Rs. 1.00 crore will be released to CIPET in instalments, keeping in view the progress of action taken for implementation of the Award scheme.	
(ii)	Centres of Excellence (CoE) in Polymer Technology	Augmenting the existing petrochemical technology and research in the country and to promote development of new applications of Polymers and Plastics, with emphasis on environmental sustainability.		2.00		At present, Department is supporting setting up of 5 CoEs at various premier research institutions in different locations- at NCL-Pune, CIPET-Chennai, CIPET-Bhubaneswar, IIT- Guwahati, IIT-Delhi. The Deptt has released entire grant amount of Rs. 6 crore to four of these CoEs, for enabling setting up of these Centres. Only in the case of IIT_Delhi, the 3 rd instalment remains to be released, on completion of the milestones. Keeping in view the useful contribution being made by these CoEs, such as giving a boost to contemporary research in Polymer science, imparting training to members of polymer industry and academia etc., the Department		The project completion usually takes 5 years from the date of initiation of the project.	Rs. 2 Cr for 1 CoE

						has proposed to set up 1 more new CoEs.			
(iii)	Setting up of dedicated Plastic Parks	Setting up of need based Plastic Parks and ecosystem with requisite state-of-art infrastructure and enabling common facilities to assist the sector move up the value chain and contribute to the economy more effectively.		45.00		<p><u>For existing 4 PPs:</u></p> <p>Assam (3rd instalment) -14.00 cr Odisha (2nd instalment) - 8.50 cr MP (2nd instalment) - 14.00cr TN 1st instalment) - 8.00cr Programme Manager - 00.50 cr (@ 9.00 lakhs)</p> <p>Total - 45.00 cr</p>		It is expected to release the 2 nd (part payment) installment for MP Plastic Park during the current FY 2015-16. The 1 st installment for TN & 2 nd for Odisha (part) and 2 nd installment for MP will become due for release during 2016-17. In addition, the 3 rd installment for Assam Plastic Park is also due for release in 2016-17. Further Rs. 50 lakhs are required for Programme Manager.	In December, 2014, the SFC had approved setting up of a total 10 Plastic Parks, including current four plastic parks and six additional/new parks for implementation during 12th and 13th Plan period. The Department had moved a proposal to M/o Finance for seeking additional funding for these 10 Plastic Parks, costing a total sum of Rs. 405 crore.
								Further, considering additional demand for Plastic parks being received from States, the Hon'ble Minister (C&F) has given 'in-principle' approval for setting	

									up 8 more Plastic Parks in September, 2015. The initiative is expected to boost not only 'Make in India' Programme but also generate huge employment.
5.	Secretariat		16.87						Salaries and Administrative Expenses
6.	Bhopal Gas Leak Disaster		25.11						Non-plan provision is towards compensation (ex-gratia) payment and Secretariat expenditure of the Welfare Commissioner, Bhopal Gas.
	Total		42.04	160.00					

* Token provision

PLAN TARGETS AND ACHIEVEMENTS – 2014-15 & 2015-16

(Rs. in crores)

2014-15 Actual	2015-16 BE	2015-16 RE	Targeted Outcomes	Achievement	
2	3	4	5	6	
1. Project Based Support to PSUs					
i) HOCL	0.00	17.00	0.00	Funds allocated for HOCL in BE 2015-16 were surrendered in the First Batch of Supplementary Demands for Grants, 2015-16. Keeping in view that the company had defaulted in repayment of earlier loans and interest thereon and also that its revival plan had not been approved, the funds allocated to HOCL were surrendered for meeting the requirements in other schemes, i.e. CIPET (Rs. 15 crore) and CPDS (Rs. 2 crore).	--
ii) HIL	15.00	10.00	10.00	2014-15 i) Rs.4 crore Plan loan was provided to HIL for (a) setting up facility for manufacturing Glyphosate (Tech), a broad-spectrum systemic herbicide, by retrofitting its Endosulfan plant at Kochi unit (b) manufacture high purity Dicofol at Kochi unit in its existing plant (c) Suspension Concentrate (SC) formulation at Bathinda unit, and (d) replace Induced Draft Cooling Tower with a new one of same capacity at Rasayani unit. These schemes are expected to result in increase in turnover of the	All the schemes are presently at various stages of implementation and are expected to be completed during 2016-17.

				<p>company by about Rs.24.50 crore and utility expenditure savings.</p> <p>ii) Rs. 11 crore Plan loan was also provided to the company for setting up 1000 MTPA Pendimethalin Tech. (a herbicide) facility at Kochi unit. This is expected to contribute additional Rs.45 crore to the company's turnover.</p> <p><u>2015-16</u></p> <p>i) The company has proposed to utilise the Plan loan of Rs.10 crore for setting up a multi-product facility at its Rasayani unit for manufacture of fungicides (Hexaconazole and Tebuconazole). This facility will enable the company to further diversify its agrochemical business and reduce the company's dependence on DDT revenues. Rs.90 crore increase in turnover is expected at 100% capacity utilisation from this project. The above schemes will enable HIL to reduce its dependence on DDT revenue and improve its financial performance through diversification of agrochemical products.</p>	<p>Proposal received from HIL for release of the Plan loan is under process in the Department and Ministry of Finance.</p>
iii) HFL	16.80	5.00	5.00	<p><u>2014-15</u></p> <p>i) Plan loan of Rs.3.60 crore was provided to HFL for development of specialized PTFE i.e. modified PTFE (MPTFE), through modifications in the existing system. MPTFE has higher margins than PTFE and the company expects to earn additional income of about Rs.3 crore from MPTFE.</p>	<p>After commencement of production, company exported about 7.2 MT of MPTFE worth about Rs.46 lakhs in March, 2015. Rs.3 crore income is expected during 2016-17.</p>

				<p>ii) Rs.13.20 crore Plan loans was also provided in 2014-15 for refurbishment schemes and small projects. These are expected to result in more value added products and contribute Rs.6 crore per year to the company's turnover. Savings of about Rs.2 – 3 crore per year are also expected due to increased efficiency and productivity of the plants.</p> <p>The above schemes will enable HFL to improve its financial performance through increased turnover and cost reduction and thereby facilitate turnaround of the company.</p> <p><u>2015-16</u></p> <p>i) The company has proposed to utilise the Plan loan of Rs.5 crore for setting up a 800 KW solar power plant to reduce the electricity bill / cost. However, in view of guidelines issued by Ministry of Finance OM dt. 3.2.2016 providing that the window of investment and working capital loans is hereby closed and that CPSUs should raise debt from market or from banks, decision has been taken by the Department to not further process the release of plan loan of Rs. 5 crore to HFL.</p>	<p>The refurbishment schemes are at various stages of completion and all equipments are not yet put into service. Same are expected to be completed in 2016-17.</p>
2. Central Institute of Plastic Engineering and Technology	100.85	107.68	107.68	<p>Training and Research in the field of plastics technology</p>	<p>A total number of 48161 as on 31.01.2016 were enrolled / trained in its long term courses as well as short-term training programmes. during 2015-16 as against 42910 persons trained during 2014-15. CIPET is committed for training to 80000 participants through long-term and short-term training programmes. Work and on creation of requisite civil infrastructure as well as on acquiring computer hardware/software, equipments/instruments etc., for its teaching and research work continued as planned.</p>

3. Institute of Pesticides Formulation Technology	1.68	1.00	1.00	Promote advancement of pesticides formulation technology	<p>IPFT continues to be accredited Laboratory by National Accreditation Board for Testing & Calibration Laboratories (NABL) as per ISO/IEC – 17025 (2005) for the analysis of pesticides and their formulations, pesticide residues in food matrices and CWC related chemicals. IPFT received record number of Industry sponsored projects for data generation on Bioefficacy, Phytotoxicity, Residue Analysis and Stability Studies. IPFT signed MoU with Higher School of Agriculture, University of Lome, Togo for collaborative Research Work and signed MoUs and CDA with Krish Biotech, Kalyani and Biotech International.</p> <p>IPFT has become an IGNOU Programme Study Centre for “Post Graduate Diploma in Analytical Chemistry (PGDAC)” with effect from January, 2015 and it continued in the year 2016-17. IPFT has successfully developed Solid WDG formulation of liquid insecticide Chlorpyrifos. The patent has been filed. IPFT has developed water based micro-emulsion combination formulation of two herbicides. IPFT has developed nano formulations from plant extract which may minimize use of synthetic pesticides. Development of standard homogenous population of <i>Helicoverpaarmigera</i> and <i>Spodoptera</i> collected from field and transfer under lab conditions.</p> <p>IPFT has successfully developed nano-encapsulated sprayable formulation for inpregration of insecticide in soldiers dress. IPFT has been certified by Central Insecticide Board Registration Committee (CIB/RC) for the data generation on Bioefficacy, Phytotoxicity and pesticide residue analysis. IPFT presented a country paper entitled “Plant protection strategy and Biopesticides in India” at Regional Network on Pesticide for Asia and the Pacific (RENAP) held at Kathmandu, Nepal. IPFT has brought out leaflets for promotion of safe and adequate use of pesticides at Farmer’s field level and distributed the same to farmers. Neem based commercially viable economic formulations have been developed with high efficacy as compared to presently available neem based pesticide formulations. Data is being generated for registration with Central Insecticide Board (CIB) to bring the product in the market for directly use by the farmers</p>
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4. Assam Gas Cracker Project	0.01	0.01	0.01	Setting up a Petrochemical complex at Lepetkata, Dibrugarh (Assam).	<p>The Government of India's contribution to the project, as per revised cost estimates, is in the form of capital subsidy of Rs.4690 crore against project cost of Rs. 8920 cr.</p> <p>In view of time overrun, foreign exchange fluctuations, price escalation, increase in statutory levies etc., further cost and time escalation has occurred and therefore, BCPL has proposed revised project cost of Rs. 9,965 crore as against the approved project cost of Rs.8,920 crore. The revised project cost has been estimated based on timelines for overall commissioning by December, 2015. The estimated increase in project cost of Rs. 1045 crore is proposed to be funded by capital subsidy of Rs. 549.45 crore, equity of Rs. 148.67 crore and debt of Rs. 346.88 crore The proposal will be placed before the Public Investment Board (PIB) as per the laid down procedure.</p> <p>The project has been commissioned on 2nd January, 2016.</p>
5. Chemical Promotion & Development Scheme (CPDS)	3.53	1.90	3.90	Promotional activities, exhibition, seminars, research, study and development etc.	Various events for the promotion of chemicals & petrochemicals industries including organization of India Chem series of events, sponsoring various seminars/conferences/workshops/studies are held.
6. Chemical Weapons Convention(CWC)	0.87	1.00	1.00	Awareness creation through organization of seminars and publicity and to facilitate compliance by the industry	<p>India has received 206 inspections till 31.12.2015. Help Desks in PPP mode in association with Indian Chemical Council (ICC) have been set up at Vadodara, Mumbai, Chennai, Hyderabad, Kolkata and Delhi for facilitating compliance by the chemical industry towards its obligations under CWC. To facilitate compliance by the industry and</p> <p>have efficient monitoring mechanism, a project of online submission of declarations by industry covered by the Convention has been implemented through NIC. Annual Declaration of Anticipated Activities (ADAA) -2016 was filed in September, 2015 and the second declaration namely Annual Declaration of Past Activities for 2015 has planned to comply and send on time.</p>

7. Other new schemes of petrochemicals	12.17	58.41	17.50	To implement the three schemes namely (i) National Awards for Technology Innovation in various fields of Petrochemicals and downstream Plastic Processing Industry; (ii) Setting up Centres of Excellence (CoEs) in the field of Petrochemicals; and (iii) Setting up Plastic Parks	<p>For 2014-15, 264 nominations were received by CIPET. Based on the recommendations of the 'Prize Award Committee', 17 'Winners' and 14 'Runners up' have been selected for 2015-16. The function to present the awards was held on 20.01.2016 at Delhi.</p> <hr/> <p>Government of India provides financial support to the extent of maximum of 50% of total cost of the project subject to an upper limit of Rs. 6 crore over a period of three years. The GoI grant of Rs. 6 crore has been released to the CoEs at Pune, Chennai and Bhubaneswar. In 2015-16, based on the recommendations of the Expert Committee, constituted to review the physical and financial performance of the selected CoEs, the 3rd installment of Rs. 2 crore has been released to IIT, Guwahati.</p> <hr/> <p>The Scheme Steering Committee (SSC) had earlier accorded approval to the proposals for establishment of plastic parks received from States of Madhya Pradesh, Odisha and Assam. The Department had released the first installment of Rs.8 crore of the Grant in Aid in the year 2013-14 to the Special Purpose Vehicles (SPV)/ Key Promoters for setting up plastic parks at Madhya Pradesh, Odisha and Assam. The second installment of Rs. 14 crore of the Grant in Aid has also been released for Assam Plastic Park in 2015. Following the submission of the Detailed Project Report (DPR) by the State Govt. of Tamil Nadu, the SSC has accorded approval on 30.10.2015 for establishment of a Plastic Park in Tamil Nadu.</p> <p>The Department, with the approval of the competent authority, had moved a proposal to seek additional funding for setting up of 10 plastic parks, including current four plastic parks (approved by SSC) and six additional parks for implementation during 12th and 13th Plan period. Further, considering additional demand being received from various States, the Hon'ble Minister (C&F) has given 'in-principle' approval for setting up 8 more Plastic Parks in September, 2015 (which are in addition to 10 Parks already approved). The initiative is expected to boost not only 'Make in India' Programme but also generate huge employment.</p>
8. Provision for NE	*	*	*	Development of NE region	Development of NE region.
Total	151.38	188.00	141.89		

*Already included in other Scheme of Petrochemicals/CIPET/Plastic Parks