

5TH ANNUAL REPORT 1995-96



INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY

Registered Under Societies Act XXI (Registration No. S-21944/1991)

Sector 20, Udyog Vihar, Gurgaon - 122 016 (Haryana)

INTRODUCTION

In its fifth year of operation Institute of Pesticide Formulation Technology has been serving the industry and farmers by promoting safer, efficient, environmental friendly, economical and new generation pesticide formulation. The Institute of Pesticide Formulation Technology has been able to establish a healthy rapport with the industry and have been receiving active support from the pesticide industry of the country.

The Institute, being a non-profit making organisation, was registered as a Society under the Societies Registration Act on May 31, 1991. The Institute is located in a sprawling complex of 17 acres of land on the National Highway No. 8 at the border of Delhi-Gurgaon which is about 8 Kms. from Indira Gandhi International Airport, Delhi. The Institute has well equipped facilities for research and development as well as training facilities covering various aspects of pesticide formulations like development, manufacture, quality control, safety, packaging and study of bio-efficacy of pesticides.

The Institute is on the threshold of becoming one of the premier institutes of its kind in the Asia and the Pacific region.

The Institute is recognised by the Department of Scientific and Industrial Research, Ministry of Science & Technology. Regional Network on Safe Pesticides Production and Information for Asia and the Pacific, a programme of UNIDO/UNDP has assigned it the role of technical coordinator unit on pesticide formulation technology and quality control.

ACTIVITIES DURING THE YEAR UNDER REPORT

Services Rendered to the Pesticide Industry

Pesticide Formulation

One of the major objectives of the Institute is to undertake research in pesticide formulation technology, encourage in the broadest and most liberal manner the advancement of pesticide formulation technology to the industrial sector so that the Indian farmers could avail the user friendly products like their counterparts in the developed countries. The safer formulations like Suspension Concentrate (SC), Water Dispersible Granules, Concentrated Emulsion, Micro-emulsions and Controlled Release Formulations have the following major advantages over the conventional ones :-

- a) overall reduction of load on environment due to lesser requirement of active ingredient in the formulation.
- b) reduced use of flammable, toxic and costly petroleum base solvents which do not disintegrate easily in the nature and comes back to the food chain.
- c) reduction in exposure hazards and improved handling qualities being dustless and water based formulations.

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

The Institute is also planning to undertake development work on other newer types of formulations like jels and water dispersible tablets to keep abreast with the latest trend of formulations in the developed countries.

Laboratory Facilities

The Institute has well-equipped facilities for the development of state-of-art pesticide formulation. The specialised equipments like Dyno-Mill, Eiger Mill, Fluid Bed Spray Granulator, Spray Drier, Turbula Mixer, Pan and Disc Granulator, Extruder, Silverson Mixer and Climatic Chamber etc. are available in the laboratory. The laboratory would shortly be installing the latest model of laser based particle size analyser. In addition to highly specialised equipment the laboratory has highly trained and a motivated team of scientists.

Sponsored Projects

During the year 1995-96 the following projects were sponsored by the industry:

1. Isoproturon + Diclofop Methyl Ready Mix Formulation – the technology for 25/25 WP of this combination product meeting the proposed specifications of the sponsorer was developed.
2. Captan Water Dispersible Granules – Successfully developed technology for Captan 83/80 WG having suspensibility of around 95% with excellent spontaneous dispersability.
3. Development of WG Formulations – The process development studies for WG formulations of Isoproturon 75 WG, Cypermethrin 40 WG, Glyphosate 41 WG and Monocrotophos 36 WG have been sponsored by the industries and the work on Isoproturon 75 WG has been completed and quality of the product has been accepted by the sponsorer. The work of development of Cypermethrin 40 WG is in progress and is expected to be completed in the first quarter of next year. Studies of Monocrotophos and Glyphosate WG formulation would commence after the Cypermethrin work is completed.

Developmental Studies

Development of Concentrated Emulsion/Micro Emulsion and SL Formulations of Cypermethrin & Dimethoate are at the final stages. One of the multinational companies has evinced interest in the formulation of Dimethoate. In addition to this, exploratory work has been completed for Micro Encapsulated Suspension Formulation of Cypermethrin 25 CS and Chlorpyrifos 20 CS and the results are promising.

Processing Facilities – In addition to developmental studies, the processing facilities were extended to M/s. United Phosphorous and M/s. Sulphur Mills Limited.

Particle Size Testing

During the year under review 163 samples were tested for M/s. Daurala Organics (89 samples), M/s. Rallis India (26 samples), M/s. Sulphur Mills (14 samples), M/s. Lupin Agro (9 samples), M/s. IA&AC (6 samples), M/s. Usha Mill (5 samples)

& others (14 samples).

During the year 1995-96 the pesticide formulation laboratory has been able to generate an income of Rs. 10.63 lakhs through services rendered to the industry.

Analytical Facilities

The Analytical Laboratory is engaged in developing new methods for analysing active ingredients of pesticide, validation/modification of existing methods, preparation of reference standards of pesticide, impurity profile analysis and pesticide sample analysis for quality assurance & quality control. The laboratory is fully equipped with state-of-art analytical equipments and is recognised as an independent testing laboratory by the Bureau of Indian Standard (BIS) for analysing/testing of pesticide samples and their formulations.

The laboratory is providing pesticide analytical services, method development, method validation and verification of impurity profile of technical pesticide and their formulations to the pesticide industry and BIS.

The Analytical Lab has analysed 500 samples of different parties and has generated an income of Rs. 4.16 lakhs.

Method Development

The Institute has developed HPLC method for estimating the active ingredient content of *Azadirachtin* in Neem based formulation. This method has been accepted by the Bureau of Indian Standards as one of its standard methods.

A Gas Chromatographis method for active ingredient testing for Phorate is under development.

Collaborative Studies

1. *Collaborative International Pesticide Analytical Council Limited (CIPAC) Collaborative Studies* – Collaborative studies under CIPAC for active ingredients analysis of thiodicarb, glyphosate and chlorsulfuron have been conducted during the year.
2. *FAO/IAEA/GTZ Collaborative Studies* – Collaborative studies for analysis of active ingredients of glyphosate, DDVP, Cypermethrin, Dimethoate, Fenvalerate and one unknown compound have been undertaken.
3. *BIS Collaborative Study* – A collaborative Study with CIL/RC for the GC method for active ingredient analysis of phorate has been undertaken during the year.

Preparation of Reference Standards : Primary Standards of DDVP, Glyphosate, Acephate, Ethion, Isoproturon and Butachlor have been prepared and certified.

Participation in the BIS Committees : The Analytical Chemist of the Institute participated in the following BIS Committees:

- i) FAD-1 : Pesticide Sectional Committee.
- ii) FAD-34 Sectional Committee on Pesticide Residues
- iii) FAD-1(361): Panel of experts for revision of BIS specification.

- iv) CHD-001: Chemical Standards, Sectional Committee.

Chemical Weapons Convention (CWC) : The Analytical Chemist represented as Expert on behalf of Government of India on 'Expert Group Meetings' on Equipment Inspection Procedures, Challenge Inspection, Health and Safety Guidelines and Confidentiality Commission of the Preparatory Commission for the Organisation of the Prohibition of Chemical Weapons (OPCW) at the Hague.

In order to sensitize the chemical industry on the likely impact of CWC, National Trial Inspections have been conducted during the year under review.

Projects Anticipated

The following projects are expected:

- i) Sample analysis : About 700 samples of pesticides from Maryland University, USA.
- ii) Establishment of Chemical Equivalence : M/s. Hindustan Pulverising Mills (HPM), Delhi.
- iii) Impurity profile analysis : M/s. Excel Industries Limited, Bombay, M/s. Kanoria Chemicals Limited, Delhi, M/s. Bhopal Pesticides Limited, Bhopal, M/s. United Phosphorus Limited, Ankleshwar, M/s. Pesticide India Limited, Lucknow.
- iv) Method development : Bureau of Indian Standard, M/s. Hindustan Pulverising Mills, Delhi, M/s. R.P. Pvt. Limited, Bombay, M/s. Excel Industries Limited, Bombay.

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 services have been offered to the pesticide industry for the generation of bio-efficacy data required for registration of pesticides. The laboratory also conducts training programmes/workshops on Pesticide Registration and Regulations for pesticide industries.

The studies completed/being carried out are summarised below:-

Sponsored Projects:

- i) *Bio-efficacy and Phytotoxicity of Chlorpyrifos 50 WP and Endosulfan 50 WP:*

The project on bio-efficacy and phyto-toxicity of chlorpyrifos 50 WP and Endosulfan 50 WP on okra and cotton crops for two years had been sponsored by M/s. Excel Industries Limited., Bombay during 1994-95. Field trials had been conducted during 1994-95 and 1995-96 for Chlorpyrifos WP and for Endosulfan WP during 1995-96 on okra and cotton crops. The compilation and statistical analysis of data is in progress. A total fee of Rs. 1,66,400 was received during 1994-95 out of this project.

- ii) *Bio-efficacy Studies of Household Formulations:*

The project on bio-efficacy studies of household formulations against three species

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

viz. : mosquitoes, house fly and cockroaches was sponsored by M/s. Excel Industries Limited., Bombay during 1995-96. The bio-assay studies through lab trials have been initiated and further work is in progress. The Institute has charged Rs. 11,550 for this project to the sponsorers.

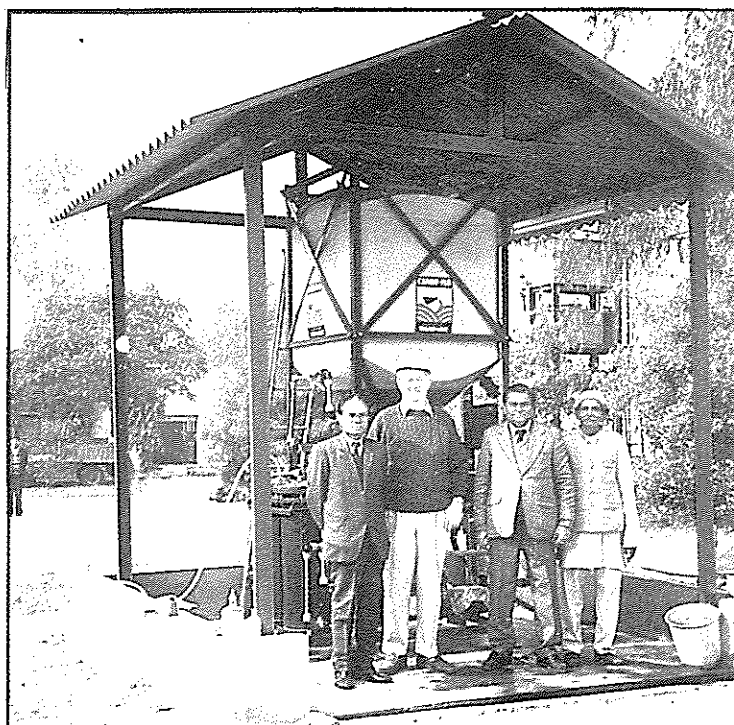
The total income generated by the Bio-sciences Department during the year was Rs.1,77,950.

Botanical Pesticides : Four plant species having pesticidal activity have been identified. The possibilities of collaboration with Botanical Research Institute, Lucknow regarding supply of plant species to IPFT has been explored. Collaboration between IPFT & Rothamsted Experimental Station, UK regarding botanical pesticides developed is under consideration.

Pilot Plant

The pilot plant is fully equipped with facilities for scaling up of new formulations developed in the formulation laboratory up to semi commercial level and state of the art equipments required for developing newer safe & eco-friendly formulations are installed in the pilot plant. In addition, process equipments required for conventional formulations like WP, Dust, EC etc. are available for the production and demonstration during training programmes.

A compact effluent treatment plant has been installed and commissioned for treating the effluents generated from the Institute's laboratories and pilot plant and also being used for imparting 'hands-on training' to the pesticide industry personnel. This unit will serve as a model for the pesticide formulation industry for treating their effluents.



View of effluent treatment plant (ETP)

The studies completed/being carried out in the pilot plant are summarised below:-

1. *Semi-Commercial Production of Cyfluthrin formulation* – Job work for semi commercial production (25 kg. level) of Cyfluthrin formulation has been completed for M/s. Bayer India Limited.
2. *Semi Commercial Production of Isoproturon Formulation* – Job work for semi-commercial production (50 kg. level) of Isoproturon formulation as Suspension Concentrate has been completed for M/s. Montari Industries Limited.
3. *In-house Formulation Development Work undertaken during the year are as follows:*
 - a) *Formulation Processed :*
 - 1) Sulphur WG,
 - 2) Isoproturon + Diclofop Methyl WP,
 - 3) Cypermethrin WG.
 - b) *Equipment used :* Lodge Mixer, Ribbon Blender, Fluid Energy Mill, Fluid Bed Granulator & Ultra Fine Vortex Mill.
 - c) *Scale of Production :* 1 to 5 kg. level

Job Work Anticipated:

- i) Market seeding of SC formulations from M/s. Montari Industries, Mohali.
- ii) WG formulation from M/s. Sulphur Mills, Bombay and from M/s. Rallis India, Bombay.

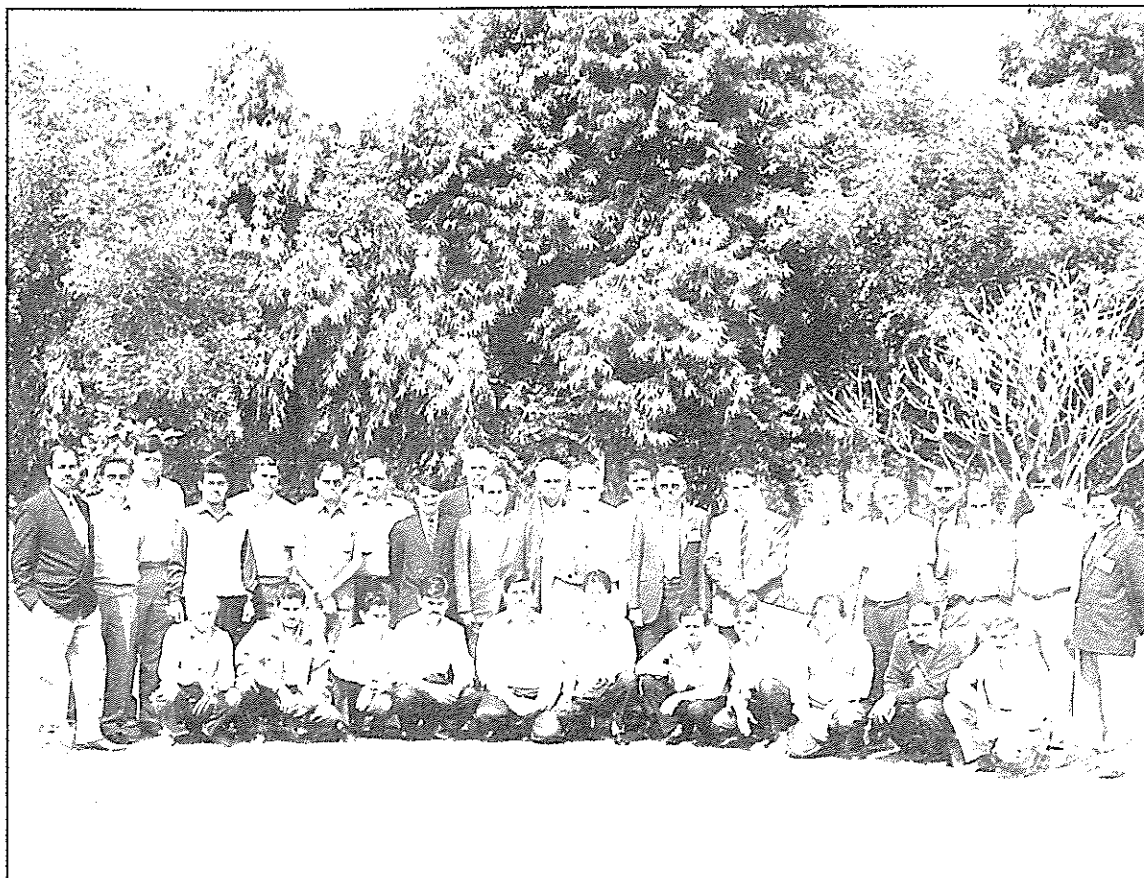


Certificate distribution during training programme on industrial safety and effluent treatment

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Training Programmes Conducted : Details of training programme-cum-meet conducted during the year are given below :

<i>No. Details of Training programme/duration</i>	<i>No. of Participants</i>
1. Training programme-cum-meet on various aspects of waste minimisation, management and effluent treatment at Ankleshwar, 15-16 January, 1996.	23
2. Training programme-cum-meet on various aspects of waste minimisation, management and effluent treatment at Delhi, 18-19 January, 1996.	23
3. Training Programme-cum-meet on technical aspects of packaging in pesticide industry at Gurgaon, 22 January, 1996.	09
4. Training programme-cum-meet on various aspects of waste minimisation, management and effluent treatment at Madras, 24-25 January, 1996.	21
5. Workshop on pesticide registration and regulations during Feb. 26-01 March, 1996.	25



Delegates attended training programme on pesticide registration and regulation

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Human Resource

The Institute has highly qualified, trained, dedicated and competent scientists and technologists, many of whom have been trained in the world renowned 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.

Regional Network on Safe Pesticides Production and Information for Asia and the Pacific (RENAP)

IPFT continued to provide technical backup and functions as Technical Coordinator Unit (TCU) on user and environment friendly pesticide formulation technology and quality control for the Regional Network on Safe Pesticides Production and Information for Asia and the Pacific (RENAP). Facilities of the TCU are extended to the member countries of RENAP for training, consultancy and trouble shooting. The Institute on behalf of Government of India is providing the secretarial assistance facilities and logistic support to the RENAP.

Management

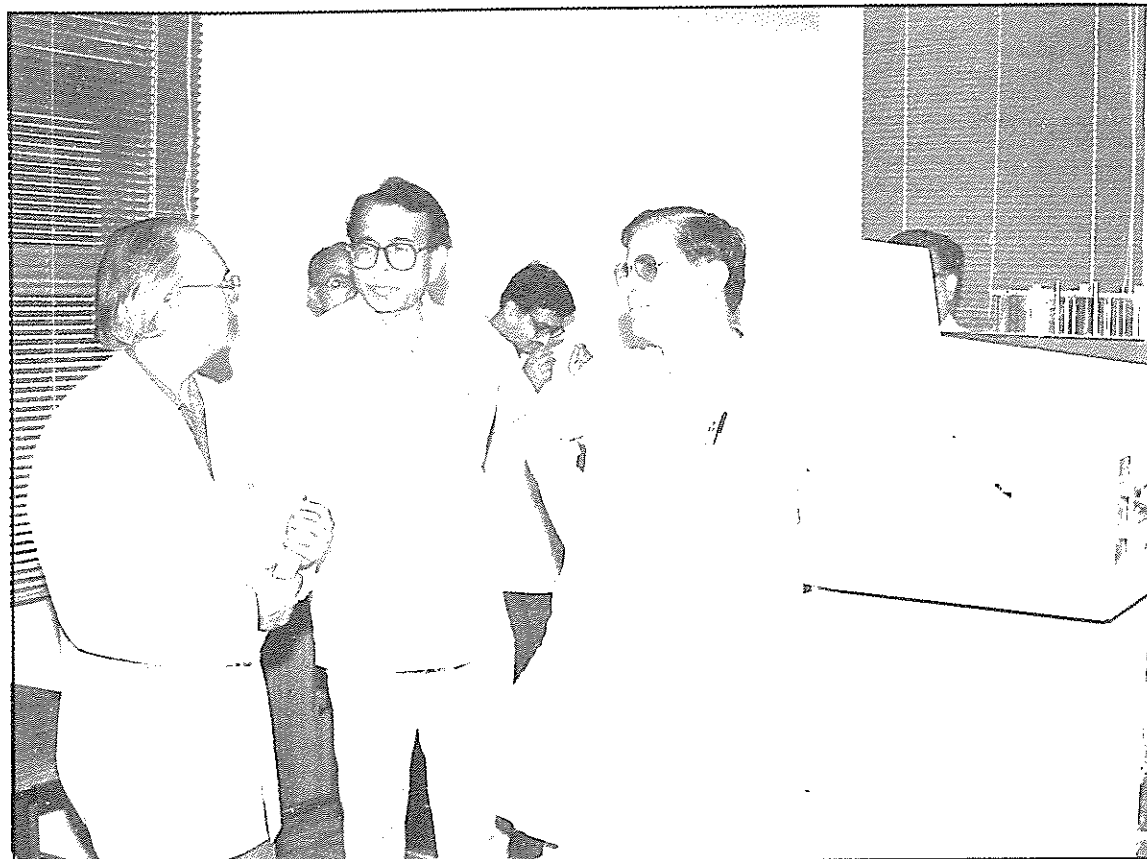
The composition of the Governing Body of the Institute is given below :-

1. Shri P.C. Rawal, Joint Secretary, Deptt. of Chemical & Petrochemicals
2. Shri I.S. Malhi, Joint Secretary, Ministry of Agriculture
3. Shri N. Gopalan, Joint Secretary & Financial Adviser, Ministry of Chemicals & Fertilizers
4. Dr. A.V. Ramarao, Director, Indian Institute of Chemical Technology, Hyderabad.
5. Smt. Shailja Chandra, Joint Secretary, Ministry of Health.
6. Shri D. Jayaprakash, Chairman & Managing Director, Hindustan Insecticides Limited,
7. Director of Agriculture, Govt. of Bihar, Patna.
8. Secretary Industries, Govt. of Haryana, Chandigarh.
9. Dr. S.P. Dhua, Part-time Chairman, IPFT.
10. Dr. Kawal Dhari, General Manager (R&T), Hindustan Insecticides Limited, Secretary, IPFT.

Review of the Working of the Institute by the Standing Committee on Petroleum and Chemicals

The activities of the Institute were reviewed by the Standing Committee on Petroleum and Chemicals during the year 1995-96. The committee visited the Institute and had three sittings with the officials of the Institute and the Department of Chemicals and Petrochemicals, Ministry of Chemicals & Fertilizers. The final report was

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON



Visit of Parliamentary Standing Committee on petroleum and chemicals

submitted in February 1996 to the Parliament. The Committee commended the activities of the Institute and desired its further strengthening for developing more and more user and environment friendly pesticide formulations needed for the farmers for their safety.

ACCOUNTS AND AUDIT

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

INCOME AND EXPENDITURE

Figures for 1994-95

Figures for 1995-96

IPFT	RENPAF	TOTAL	HEAD OF ACCOUNT	IPFT	RENPAF	TOTAL
2374430.79	477804.18	2852234.97	Salaries & Wages	3949565.08	729782.73	4679347.81
239807.20	—	239807.20	Payment against revision of Grades	—	—	—
178606.00	21175.00	199781.00	Institute Contribution to PF	313033.50	29685.00	342718.50
11664.50	—	11664.50	Admn. Charges on PF	13818.00	905.00	14723.00
8608.50	—	8608.50	DLI Charges on PF	8877.00	503.00	9380.00
142.00	—	142.00	Instt's Contribution to Wel. Fund	124.00	—	124.00
6200.00	1200.00	7400.00	Bonus	22466.65	2500.00	24966.65
2819458.99	500179.18	3319638.17		4307884.23	763375.73	5071259.96
77124.85	2566.52	79691.37	Staff Welfare Expenses	91690.44	9562.33	101252.77
60683.01	11573.30	72256.31	Transport Subsidy	58284.59	8706.00	66990.59
108338.15	11849.60	120187.75	LTC	29546.60	—	29546.60
240043.71	18062.00	258105.71	Medical Expenditure	333950.18	34590.57	368540.75
90449.00	14009.00	104458.00	Gratuity	47105.55	1845.00	48950.55
54588.58	11999.18	66587.76	Leave Encashment	64810.93	20575.50	85386.43
90647.90	12166.35	102814.25	Canteen Subsidy	93349.90	13882.20	107232.10
2640.00	—	2640.00	Washing Allowance	3480.00	—	3480.00
724515.20	82225.95	806741.15		722218.19	89161.60	811379.79
—	750.00	750.00	Expenses on PMC Meeting	—	500.00	500.00
169563.88	12731.00	182294.88	Travelling Expenses	139854.70	18060.10	157914.80
5109.50	2026.75	7136.25	Entertainment Expenses	31372.48	3513.80	34886.28
6244.00	9115.50	15359.50	Miscellaneous Expenses	47212.36	3587.74	50800.10
56812.98	7618.05	64431.03	Repair & Maintenance	43717.54	454.50	44172.04
10794.16	—	10794.16	Laboratory Expenses	4205.95	—	4205.95
29061.87	—	29061.87	Chemicals	19750.20	—	19750.20
31653.90	3599.60	35253.50	Postage, Telegram & Telephones	54036.87	4208.00	58244.87
868.65	—	868.65	Expenses on Bio-Science Test	2279.00	—	2279.00
42707.60	173938.50	216646.10	Rent, Rates & Taxes	23452.10	226179.60	249631.70
15276.13	504.00	15780.13	Insurance	5307.91	—	5307.91
245994.94	6067.00	252061.94	Electric Charges Incl. Diesel	232201.90	6909.50	239111.40
38911.86	27157.90	66069.76	Printing & Stationary	106226.66	47177.45	153404.11
16557.86	30143.41	46701.27	Vehicle Maintenance	18060.78	24758.42	42819.20
96190.97	—	96190.97	Security Charges	117323.18	—	117323.18
6189.00	—	6189.00	Staff Training Expenses	150.00	—	150.00
150.00	—	150.00	Subscription & Membership Fees	150.00	—	150.00
9578.55	—	9578.55	Newspaper and periodicals	7026.00	—	7026.00
2404.00	50.00	2454.00	Bank Charges	1956.00	—	1956.00
25.00	—	25.00	Cartage & Cooliage	1086.00	225.00	1311.00
11850.00	11850.00	23700.00	Legal Expenses	850.00	850.00	1700.00
5000.00	—	5000.00	Audit Fees	5000.00	—	5000.00
2000.00	—	2000.00	Remuneration to Auditors (other jobs)	2000.00	—	2000.00
6005.00	—	6005.00	TA to Auditors	—	—	—
21165.58	3381.30	24546.88	Depreciation	172491.87	3382.31	175874.18
—	—	—	PLI	—	—	—
128202.05	—	128202.05	Expenses on CWC	138350.05	—	138350.05
48000.00	—	48000.00	Consultancy Charges	24000.00	—	24000.00
46051.00	—	46051.00	Recruitment expenses	8608.00	—	8608.00
53250.00	—	53250.00	Brochure Printing Charges	—	—	—
16998.99	—	16998.99	Debit relating to earlier years	616936.41	3071.00	620007.41
—	50356.22	50356.22	Seminar & Workshop Expenses	—	450.00	450.00
—	—	—	Less Income	—	—	—
—	—	—	Expenses on ETP	29781.14	—	29781.14
—	—	—	Sample Clearance Charges	2410.00	—	2410.00
1354589.28	52431.04	1407020.32	Transferred from reserve & Surplus	—	—	—
6021180.94	974125.40	6995306.34		6885899.52	1195864.75	8081764.27

Sd/-

(B.R. Sharma)
Finance Officer

Place: New Delhi
Date: 3rd September, 1996

Auditor's report
In terms of our Separate report of even date

for Ajit & Associates
Chartered Accountants

Sd/-
(Partner)

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

FOR THE YEAR ENDING 31-03-1996

Figures for 1994-95

Figures for 1995-96

IPFT	RENPAF	TOTAL	HEAD OF ACCOUNT	IPFT	RENPAF	TOTAL
3700000.00	500000.00	4200000.00	Grant in Aid	3700000.00	500000.00	4200000.00
			Contribution from Industry			
			Membership Fee Recd.	—		
			Less: Transferred to	—		
			Membership fee fund account	—		
	469050.00	469050.00	Received from UNDP		454132.00	454132.00
305400.00	—	305400.00	Testing Charges Recd			
			Analytical Lab	416935.00		
			Formulation Lab	73750.00		
1465.00	—	1465.00	Hiring Charges of Mixer Rec.	490685.00	—	490685.00
118266.29		118266.29	Seminar & Workshop	—	—	—
			Receipt	149000.00		
			Less Expenses	128585.19	20414.81	20414.81
			Income from Project			
500000.00		500000.00	Formulation Lab	1063800.00		
83200.00		83200.00	Job work PP	11550.00		
			Training Fees Recd.	1075350.00		1075350.00
			Indian	—		
234128.00	—	234128.00	Foreign	—		
1400.00	—	1400.00	Interests on Deposits	63572.50	—	63572.50
522305.50	—	522305.50	Income from Corpus Fund	493734.00	—	493734.00
			Investment Account			
141488.00	—	141488.00	Income from MF Invest. A/c.	210697.00	—	210697.00
			Reimbursement by Central Govt.	—	—	—
105247.00	—	105247.00	Expenses of CWC	—	—	—
20000.00		20000.00	CWC Inspection Fee Recd.	60000.00		60000.00
4000.00		4000.00	Subscription Recd.	4000.00		4000.00
	2610.40	2610.40	Hire charges for private car Recd	162.00	677.30	839.30
	2015.00	2015.00	Sale of Publication	—	—	—
269000.00		269000.00	Credit relating to Earlier years.	3436.00	—	3436.00
15281.15	450.00	15731.15	Misc. Income			
			Income from AMF Fund	2312.00		2312.00
1354589.28	52431.01	1407020.32	Excess of Expenditure over Income	761536.21	241055.45	1002591.66
6021180.94	974125.40	6995306.34		6885899.52	1195864.75	8081764.27

Sd/-

(R.P. Luthra)
Incharge-IPFT

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

BALANCE SHEET

Figures for 1994-95

Figures for 1995-96

[illegible]

Sd/-
(B.R. Sharma)
Finance Officer

Place: New Delhi
Date: 3rd September, 1996

Auditor's report
In terms of our Separate report of even date

for Ajit & Associates
Chartered Accountants

Sd/-
(Partner)

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

AS ON 31-03-96

Figures for 1994-95

Figures for 1995-96

IPFT	RENPAF	TOTAL	HEAD OF ACCOUNT	IPFT	RENPAF	TOTAL
ASSETS						
3175990.52		3175990.52	Fixed Assets (Sch. A)			
			Capital Work in progress	3674477.27		3674477.27
			Building	2100223.00		2100223.00
109192.62		109192.62	Plant & Machinery	109192.62		109192.62
5472.30	5472.30	10944.60	Typewriter	5472.30	5472.30	10944.60
185902.66	42691.00	228593.66	Furniture & Fixture			
			Bal. as on 1-4-95			185902.66
			Add. during 95-96			132354.86
			Total As on 31-03-96	318257.52	42691.00	360948.52
5200.00		5200.00	Office Equipment			9815.00
				57968.00	—	57968.00
—		—	Laboratory Equipment			177481.56
				562362.56	—	562362.56
3300000.00		3300000.00	Investments (Sch. B)			
			Cor. Fund Inv. A/c.			3300000.00
			Addition			1000000.00
			Total	4300000.00	—	4300000.00
1520000.00		1520000.00	Membership Fund Invst. A/c.	1520000.00	—	1520000.00
2173684.41		2173684.41	Current Assets			
111459.19		111459.19	SBI New Delhi Current A/c.	6161443.41	—	6161443.41
205.65		205.65	SBI Dundahera Current A/c.	138766.60	—	138766.60
—		—	Cash in Hand	16336.91	—	16336.91
			SBI TDR	2000000.00	—	2000000.00
17430.00		17430.00	Advances			
17000.00		17000.00	To Staff	5365.93	—	5365.93
800.00		800.00	Festival Advances to Staff	16500.00	1250.00	17750.00
—		—	Staff Loan	—	—	—
—		—	Medical Advance	112320.00	—	112320.00
—		—	Advance to Parties	13060.19	—	13060.19
—		—	LTC Advance	1306.00	—	1306.00
189000.00		189000.00	Amount Recoverable			
61.50		61.50	Testing charges recoverable	164850.00	—	164850.00
3136.00		3136.00	Interest receivable	106034.50	—	106034.50
600.00		600.00	Prepaid Expenses	1765.00	—	1765.00
680.00		680.00	Amount receivable from Parties	270000.00	—	270000.00
			TDS	680.00	—	680.00
		10863978.15		21656381.81	49413.30	21705795.11

Sd/-
(R.P. Luthra)
Incharge-IPFT

SCHEDULE OF FIXED ASSETS

Particulars	Gross Block at cost			
	Cost as at 1-4-1995	Additions During the Year	Transfer During the Year	Total Cost as at 31-3-96
IPFT				
Capital Work in Progress	31,75,990.52	4,98,486.75	—	36,74,477.27
Office Equipment	5,200.00	4,615.00	—	9,815.00
Plant & Machinery	1,09,192.62	—	—	1,09,192.62
Furniture & Fixture	1,85,902.66	1,32,354.86	—	3,18,257.52
Typewriters & Duplicators	5,472.30	—	—	5,472.30
Laboratory Equipment	—	1,77,481.56	—	1,77,481.56
	<u>34,81,758.10</u>	<u>8,12,938.17</u>		<u>42,94,696.27</u>
RENPAF				
Furniture & Fixture	42,691.00	—	—	42,691.00
Typewriter & Duplicator	5,472.30	—	—	5,472.30
	<u>48,163.30</u>			<u>48,163.30</u>
PDC Assets : 01-06-1991/01-04-1995				
Building	21,00,223.00	—	—	21,00,223.00
Equipment & Supplies	3,84,881.00	—	—	3,84,881.00
Misc. Office Equipment	48,153.00	—	—	48,153.00
Vehicle	85,546.00	—	85,546.00	—
	<u>26,18,803.00</u>		<u>-85,546.00</u>	<u>25,33,257.00</u>

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

AS ON 31.03.1996

Rate of Depreciation	Depreciation				Net Balance	
	Upto 31-3-95	During the year 95-96	Written back during the year	Total Dep. upto 31-3-96	As at 31-03-96	As at 31-03-95
—	—	—	—	—	36,74,477.27	31,75,990.52
10%	800.00	948.71	—	1,748.71	8,066.29	4,400.00
15%	38,340.62	16,378.89	—	54,719.51	54,473.11	70,852.00
6%	4,378.66	14,374.64	—	18,753.30	2,99,504.22	1,81,524.00
15%	1,191.30	820.85	—	2,012.15	3,460.15	4,281.00
10%	—	12,656.46	—	12,656.46	1,64,825.10	—
	44,710.58	45,179.55	—	89,890.13	42,04,806.14	34,37,047.52
6%	3,221.00	2,561.46	—	5,782.46	36,908.54	39,470.00
15%	1,191.30	820.85	—	2,012.15	3,460.15	4,281.00
	4,412.30	3,382.31	—	7,794.61	40,368.69	43,751.00
04%	3,22,034.19	84,008.92	—	4,06,043.11	16,94,179.89	—
10%	1,47,537.71	38,488.10	—	1,86,025.81	1,98,855.19	—
10%	18,458.65	4,815.30	—	23,273.95	24,879.05	—
20%	65,116.51	—	65,116.51	—	—	—
	5,53,147.06	1,27,312.32	65,116.51	6,15,342.87	19,17,914.13	—

Sd/-
(B.R. Sharma)
Finance Officer

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

SCHEDULE

Details of Investment of Corpus Fund, Life Membership Fund and Associate Membership as on 31st March 1996

Deposit with	FDR No. & Date	Amount of Deposits Rs.	Intt. Rate p.a.	Due on	Periodicity of payment of Intt.
CORPUS FUND					
SAIL, New Delhi	2616511 11/4/94	6,00,000.00	14%	29/3/97	Monthly
SAIL, New Delhi	2620129 06/4/94	11,00,000.00	14%	6/4/97	Monthly
SAIL, New Delhi	2926889 1/3/96	5,00,000.00	15%	1/3/99	Quarterly
N.T.P.C., New Delhi	95400155 7/4/94	16,00,000.00	14%	6/4/97	Monthly
N.T.P.C., New Delhi	96400613 4/3/96	5,00,000.00	14%	3/3/99	Monthly
		<u>43,00,000.00</u>			
LIFE MEMBERSHIP FUND					
SAIL, New Delhi	2691528 21/09/94	7,00,000.00	14%	21/9/97	Quarterly
N.T.P.C., New Delhi	95400241 22/9/94	8,00,000.00	14%	21/9/97	Monthly
		<u>15,00,000.00</u>			
ASSOCIATE MEMBERSHIP FUND					
N.T.P.C., New Delhi	95400241 22/9/94	10,000.00	14%	21/9/97	Monthly
N.T.P.C., New Delhi	95308513 16/3/95	10,000.00	14%	15/3/98	Quarterly
		<u>20,000.00</u>			

Sd/-
(B.R. Sharma)
Finance Officer

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Details of Life Membership Fund Account as on 31.03.96

Date of Receipt	Name of the Organisation	Amount (Rs.)
02-09-1994	United Phosphorus Ltd., Bombay	15,00,000.00

Sd/-
(B.R. Sharma)
Finance Officer

Details of Associate Membership Fund as on 31-3-96

Date of Receipt	Name of the Organisation	Amount (Rs.)
25-08-94	Agrosynth Chemicals, Bangalore	10,000.00
28-02-95	Pest Control (I) Limited, Bombay	10,000.00
		20,000.00

Sd/-
(B.R. Sharma)
Finance Officer

Details of Credits Relating to Earlier Years

Amount received from Gujarat Pesticides Formulation Association
on account of seminar held in January 1995.

Rs. 3,436.00

Sd/-
(B.R. Sharma)
Finance Officer

Details of Debits Relating to Earlier Years

Date	Particulars	Amount
19-10-95	Arrears of Bonus for 93-94	Rs. 10,655.88
01-11-95	Arrears of Bonus for 93-94	Rs. 2,500.00
22-12-95	Bonus for 1994-95	Rs. 20,000.00
31-01-96	HIL (R&D)	Rs. 10,203.98
31-03-96	Depreciation	Rs. 5,53,147.06
31-03-96	Vehicle	Rs. 20,429.49
		Rs. 6,16,936.41

Sd/-
(B.R. Sharma)
Finance Officer

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Schedule of Income from Membership Fund Investment as on 31-3-96

Income from Life Membership Fund Investment	Rs. 2,10,697.00
Income from Associate Membership Fund Investment	Rs. 2,312.00
Income from Corpus Fund Investment	Rs. 4,93,734.00
	Rs. 7,06,743.00

Sd/-
(B.R. Sharma)
Finance Officer

NOTES ON ACCOUNTS FOR THE YEAR ENDING 31-03-96

1. As per the prevailing practice in previous year, during the last year also expenses has been booked on the basis of apportionment by Hindustan Insecticides Limited. Out of the total expenses of Rs. 49,56,907.49 (Rupees fortynine lakhs fiftysix thousand nine hundred seven and paisa fortynine only) allocated by HIL, only the following expenses have not been booked during the year by the Institute of Pesticide Formulation Technology.

Interest on unsecured loan	Rs. 1,84,628.00 ✓
Provision for Gratuity	Rs. 2,14,816.50 ✓
Provision for Gratuity (RENPAF)	Rs. 8,630.00 ✓
Provision for Bonus	Rs. 43,756.01 ✓
Legal Expenses	Rs. 10,625.50 ✓
	Rs. 4,62,456.01

2. Claim submitted by M/s. Jeet Enterprises on account of the final payment on Hostel Building pending verification of the Bill. We have made a provision for Rs. 4,87,710.00 and charged to capital work in progress.

3. Depreciation has been provided at Straight Line Method at the following rates:-

Building	04%
Vehicle	20%
Plant & Machinery	15%
Furniture & Fixture	06%
Typewriters & Duplicators	15%
Office Equipment	10%
Laboratory Equipment	10%

4. a) In pursuance of Govt. order No. 50(10)/91-Ch-I dated 31st March, 1995 ordering the transfer of the assets to IPFT w.e.f. 01-04-1995 by HIL. We have taken the following assets on our books on 1-4-95 as per the information provided by HIL vide their letter dated Ac-152 dated 30th August, 1996.

Building	Rs. 21,00,223.00
Vehicle	Rs. 85,546.00
Equipment & Supplies	Rs. 3,84,881.00
Misc. Office Equipments	Rs. 48,153.00
	Rs. 26,18,803.00

- b) Since IPFT was registered on 01-05-1991 and accordingly we have charged the depreciation w.e.f. 1-6-91 and provision made.

5. As per the List of the equipments provided by HIL the equipments worth of Rs. 54,590/- have not been identified, however, we have taken in the books of accounts, pending verification.

Sd/-
(B.R. Sharma)
Finance Officer

AUDITOR'S REPORT

To the Members of
Institute of Pesticide Formulation Technology

We have audited the attached Balance Sheet of Institute of Pesticide Formulation Technology as at 31.03.96 and the Income & Expenditure Account for the year ended on that date annexed thereto & report that :-

1. Figures of previous year have been regrouped & recast wherever necessary.
2. Building has been capitalised to the extent of Rs. 36,74,477.27. However in terms of our note in earlier years, this capitalisation does not reflect the correct value as it does not take into cognizance amount spent on the building prior to formation of IPFT. Secondly no completion certificate for the same has been obtained. Also the claims of the contractor are disputed and although the same have been provided for, the amount is pending capitalisation.

This aspect should be made the subject matter of total assets transfer of Pesticides Development Centre to Institute of Pesticide Formulation Technology as it would be erroneous to capitalise the hostel building at a value less than the amount expended.

3. The land on which the hostel building is being constructed belongs to Hindustan Insecticides Ltd. No lease agreement of the same in favour of Institute of Pesticide Formulation Technology has been executed. The legal implications of transfer of the building have not been ascertained and no provision for any liability on this Account has been created.
4. The difference in the balance of Hindustan Insecticides Ltd. due to non incorporation of certain expenses by Institute of Pesticide Formulation Technology is subject to confirmation by Hindustan Insecticides Ltd.
5. Interest on fixed deposit has been taken on accrual basis.
6. Govt. of India vide its order No. 50(10)/91-CHI dt. 31st March 1995 directed HIL & IPFT to transfer assets to IPFT w.e.f. 01.04.1995. As per the order the assets had to be transferred at book value as on 01.04.1995 as certified by HIL's auditors. Also liability in respect of Govt. Loan alongwith interest upto 01.04.1995 as certified by HIL's auditors was to be transferred to IPFT. However the basis of the transfer of equipments and building has been done by IPFT based on letter No. Ac-152 dt. 30th August 1996 from HIL Finance department. In our opinion all clauses of the Govt. order should have been implemented in its entirety and the assets/liabilities should have been transferred as certified by HIL's auditors.
7. Also depreciation on the assets incorporated in IPFT Balance Sheet during the current year as transferred from HIL has been done w.e.f. 01.06.1991. However the assets were created during the existence of PDC/PDPI prior to the creation of IPFT on 31.05.1991. Therefore effectively no depreciation has been charged on these assets for the period from date of purchase to 31.05.1991.

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Subject to the foregoing and in our opinion and to the best of our information and according to the explanations given to us the said Balance Sheet and Income & Expenditure statement read together present a true and fair view.

- i) In the case of the Balance Sheet of the statement of society's affairs as at 31st March 1996.
- ii) In the case of the Income & Expenditure statement of the excess of Expenditure over Income of the society for the year ended 31.03.1996.

For AJIT & ASSOCIATES
Chartered Accountants

Place: New Delhi

Date: September 03, 1996

Sd/-
Partner

REPLY TO AUDIT POINTS

Audit Point	Reply
1. Figures of previous year have been regrouped and recast wherever necessary	Calls for no comments
2. Building has been capitalised to the extent of Rs. 36,74,477.27. However in terms of our note in earlier years, this capitalisation does not reflect the correct value as it does not take into cognizance amount spent on the building prior to formation of IPFT. Secondly no completion certificate for the same has been obtained. Also the claims of the contractor are disputed and although the same have been provided for the amount is pending capitalisation. This aspect should be made the subject matter of total assets transfer of Pesticides Development Centre to Institute of Pesticide Formulation Technology as it would be erroneous to capitalise the hostel building at a value less than the amount expended.	This point has been noted and at the time of finalisation of the total transfer of assets to the Institute of Pesticide Formulation Technology this matter would be taken into consideration.
3. The land on which the hostel building is being constructed belongs to Hindustan Insecticides Ltd. No lease agreement of the same in favour of Institute of Pesticide Formulation Technology has been executed. The legal implications of transfer of the building have not been ascertained and no provision for any liability on this Account has been created.	HIL has very recently vide their letter No. BS/X/R&D/96 dated 29/30 August 1996 conveyed their consent to transfer a total of 17 acres of land which includes the land on which the hostel building has been constructed. The matter regarding the transfer of the land has been taken up with HUDA for completing all legal formalities.
4. The difference in the balance of Hindustan Insecticides Ltd. due to non incorporation of certain expenses by Institute of Pesticide Formulation Technology is subject to confirmation by Hindustan Insecticides Ltd.	The non incorporation of certain expenses of the Institute is being brought to the notice of HIL for their confirmation.

Audit Point	Reply
5. Interest on fixed deposit has been taken on accrual basis.	Noted
6. Govt. of India vide its order No. 50(10)/91-CHI dt. 31st March 1995 directed HIL & IPFT to transfer assets to IPFT w.e.f. 01-04-1995. As per the order the assets had to be transferred at book value as on 01-04-1995 as certified by HIL's auditors. Also liability in respect of Govt loan along with interest upto 01-04-1995 as certified by HIL's auditors was to be transferred to IPFT. However, the basis of the transfer of equipments and building has been done by IPFT based on letter No. AC-152 dt. 30th August 1996 from HIL Finance Department. In our opinion all clauses of the Govt. order should have been implemented in its entirety and the assets/liabilities should have been transferred as certified by HIL's auditors.	The value of assets as incorporated have been checked with the values as reflected in the Annual Report of HIL as certified by their auditor. However, we have been assured by HIL that values regarding other clauses of the govt. order shall be transferred in due course vide their letter No. AC-152 dated 30-8-96.
7. Also depreciation on the assets incorporated in IPFT Balance Sheet during the current year as transferred from HIL has been done w.e.f. 01-06-1991. However, the assets were created during the existence of PDC/ PDPI prior to the creation of IPFT on 31-05-1991. Therefore effectively no depreciation has been charged on these assets for the period from date of purchase to 31-05-1991.	As IPFT came into existence only on 31-5-1991 it is not possible to charge depreciation for the period prior to that.