# 7TH ANNUAL REPORT 1997-98

**INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY**

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

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

## INTRODUCTION

The Institute of Pesticide Formulation Technology(IPFT) has completed its 7th year of operation. The contribution of the Institute with regard to the development and promotion of safer, eco and environment friendly pesticide formulations which has been widely acknowledged within the country as well as in the Asia-Pacific region. The rapport being developed by the Institute with the pesticide industries of the country clearly promises the success of establishing such Institute by the Government of India with the initial assistance provided by the UNDP/UNIDO

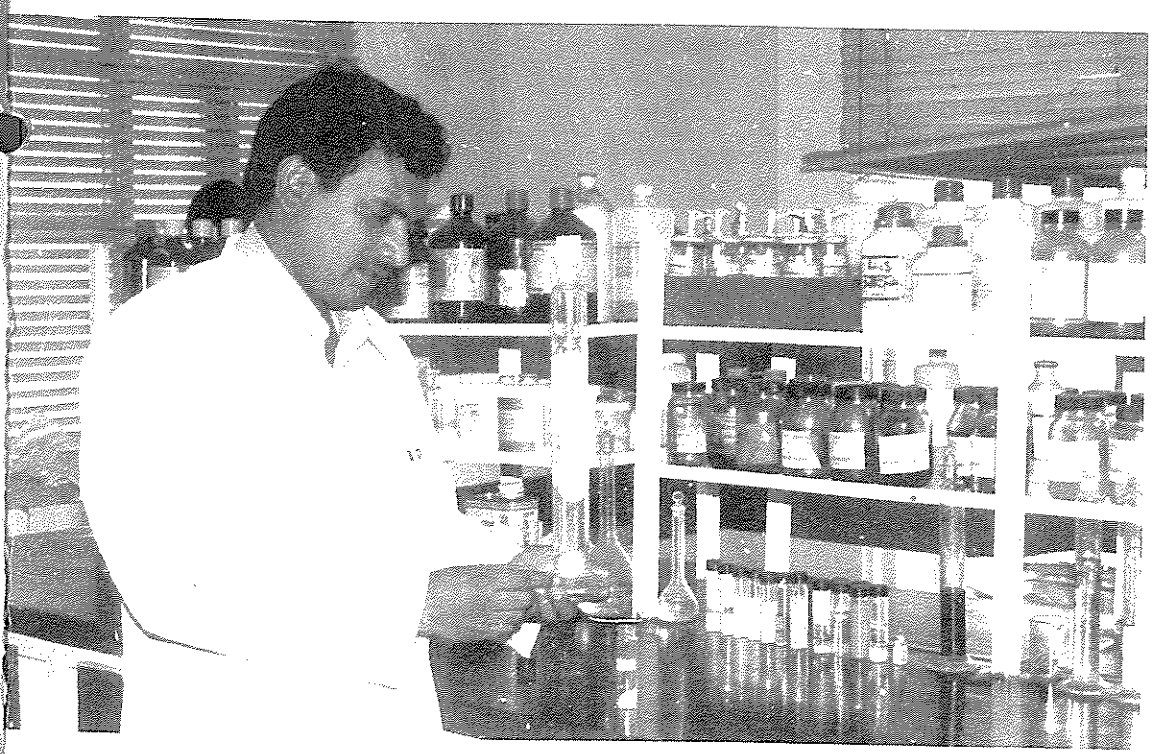
During the past seven years of the Institute as a society, (a non-profit making organisation), appreciable progress has been made and the services have been well received by the industry. The confidence shown in the activities of the Institute by the industry has resulted in increasing utilisation of the facilities of the Institute in the development and manufacture of user and environment friendly pesticide formulations. The progress of the Institute can be gauged by the increasing number of projects being sponsored by the industry in the fields of formulation development, manufacture, quality control, safety, packaging and study of bioefficacy of pesticides.

The Institute is recognised by the Department of Scientific and Industrial Research, Ministry of Science and Technology and Central Insecticides Board/Registration Committee, Ministry of Agriculture. Regional Network on Safe Pesticides Production and Information for Asia and the Pacific (RENPAP), 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

### *Pesticide Formulation*

Development and transfer of technology for user and environment friendly pesticide formulations to the Indian pesticide industry is one of the main aims of the Institute. The important new generation formulations in focus are suspension concentrates, concentrated emulsions, water dispersible granules, microemulsion and micro-encapsulated suspensions.

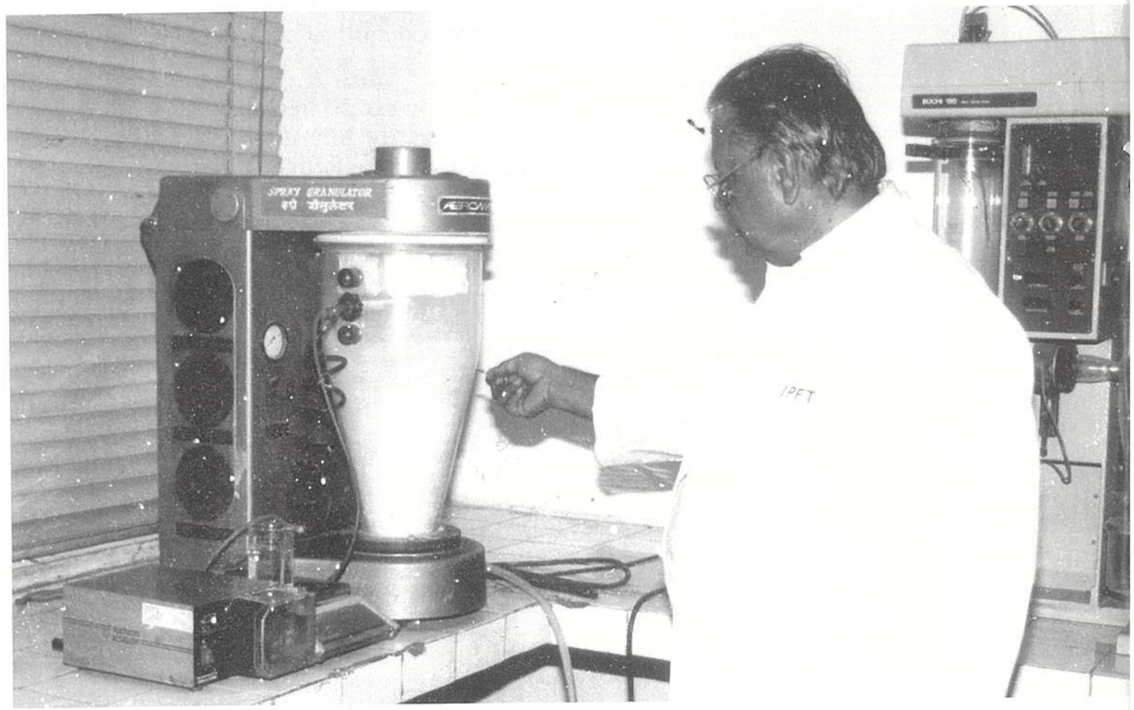


*FORMULATION LABORATORY*

The major advantages of these formulations vis-a-vis the conventional formulations like dusts, wettable powders and emulsifiable concentrates are:-

-improved efficacy and reduction in the usage of active ingredient
-more safety to the user and environment
-minimum use of toxic, flammable and non bio-degradable solvents

Inhouse expertise and infrastructure have been acquired for the development of most of the newer and conventional types of pesticides formulations. The facilities of pesticide formulation development laboratory include small media wet grinding mill, spray granulator, extruder, laser based particle size analyser, surface and interfacial tensio meters and instruments for rheological measurements.




***SPRAY GRANULATOR***

Details of the studies undertaken by the formulation laboratory during the year 1997-98 are as follows

## *Sponsored Projects*

During the year 1997-98 the four projects were sponsored by M/s. United Phosphorus Limited and one by M/s. Excel Industries Limited.

| | | | Status |
|---|---|---|---|
| 1. | Endosulfan 35 SC | Excel | Phase I completed |
| 2. | Sulphur 52 SC | UPL | Phase I completed |
| 3. | Carbendazim 85 WG | UPL | Phase I completed |
| 4. | Cypermethrin 40 WG | UPL | Ready for Phase I demonstration |
| 5. | Diuron 80 WG | UPL | Exploratory studies completed |

***Developmental Studies***

Exploratory studies completed for Mancozeb 75 WG, Methyl Parathion 25 CS and Quinalphos 20 EW.

***Processing - Job Works :*** In addition to the developmental studies, laboratory processing facilities for wet milling were extended to Rhone Poulanc.

***Particle Size Testing :*** During the year under review more than 500 samples were tested for particle size distribution for various industries.

***Projects Anticipated :*** M/s. United Phosphorus wants to sponsor about eight projects mainly based on water dispersible granules and suspension concentrate formulation technologies, of which four have already been undertaken in the year under review. M/s. Atul Ltd. wants to sponsor a project for water soluble granules of 2,4-D.

***Analytical Facilities***

Analytical Services are being offered to the Indian pesticide industries and the Bureau of Indian Standards (BIS) for the quality control and quality assurance of 150 pesticides and their formulations. Facilities of analytical laboratory include state of art analytical equipments like gas chromatograph coupled with mass spectrophotometric detector, gas chromatograph, high performance liquid chromatograph, super critical fluid chromatograph, infra-red spectrophotometer, fourier transform infra-red spectrophotometer and high performance thin layer chromatograph.

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 laboratory has analysed 350 pesticide samples of different parties including BIS.

The detail of the studies undertaken by the analytical laboratory during the year 1997-98 are as follows:

***Method Development***

(i) The Institute has developed HPLC method for estimating the active ingredient content of Triazophos.

(ii) A Gas Chromatographic method for active ingredient analysis of Ethion has also been developed.

***Collaborative Studies***

1. Collaborative International Pesticide Analytical Council Limited (CIPAC) Collaborative Studies : The collaborative studies under CIPAC for active ingredients analysis of alpha-cypermethrin have been carried out.

2. GTZ Collaborative Studies : A collaborative study for the analysis of Azadirachtin content in Neem seed kernels is in progress.

3. BIS Collaborative Study : A collaborative Study with Central Insecticides Laboratory/Registration Committee and BIS for the HPLC method for azadirachtin content in commercial formulations of neem is being worked out.

***Projects Anticipated***

The following projects are anticipated for the year 1998-99.

i) Sample Analysis : About 350 samples of pesticides from Bureau of Indian Standards and the pesticide industry.

ii) Establishment of Chemical equivalence : From the pesticide industry.

iii) Shelf-life Study : Cypermethrin and Fenvalerate formulations with Central Insecticides Laboratory, Faridabad.

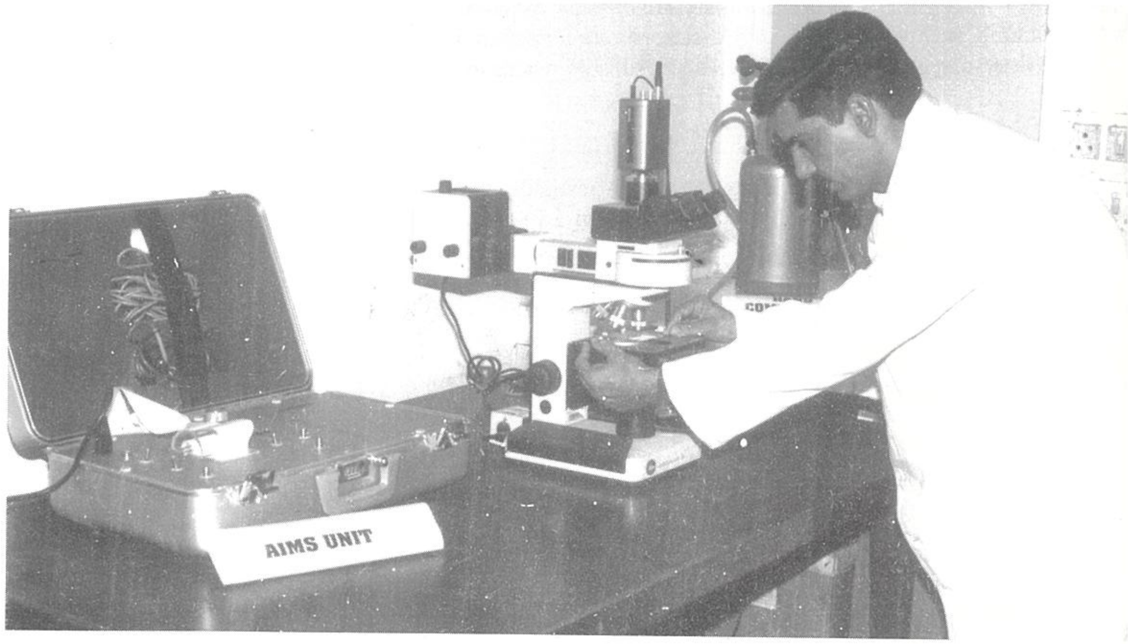
iv) Impurity profile analysis : From M/s. Excel Industries

v) Method Development : From Bureau of Indian Standards

vi) Chemical Weapons Convention (CWC) : Participated in the inspection along with CWC inspectors for CWC chemicals.

*Bio-Science Laboratory*

The Institute has a well equipped bio-sciences laboratory for undertaking biological evaluation of pesticic and their formulations. The facilities available include microjet/microdoser applicator, Quantimet ima analyser, AIMS Droplet Measurement and Analysis Device, Kearns and March Knockdown chamber, se treatment unit, etc.




*AIMS UNIT*

The Institute also has well equipped facilities for field trials on agricultural crops. The services offered the bio-sciences laboratory include data generation of pesticide formulations as per CIB protocol throu bio-assay, bio-efficacy, phytotoxicity evaluation, compatibility analysis and resistance assessment. The u also conducts regular training programmes/ workshops on pesticide registration and regulations for pestic industries.

The studies completed/being carried out are summarised below:

***Sponsored Projects:***

i) Bio-efficacy and phytotoxicity of Chlorpyriphos 50 WP and Endosulfan 50 WP Formulations:

The project on bio-efficacy and phytotoxicity of Chlorpyriphos 50 WP and Endosulfan 50 WP formulatic on okra and cotton crops for two consecutive years were sponsored by M/s. Excel Industries Limited, Mum during 1994-95. Field trials were conducted for two years on two crops with chlorpyriphos and endosul formulations. The work has been completed and the data has been compiled and the final report has be compiled for submission.

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

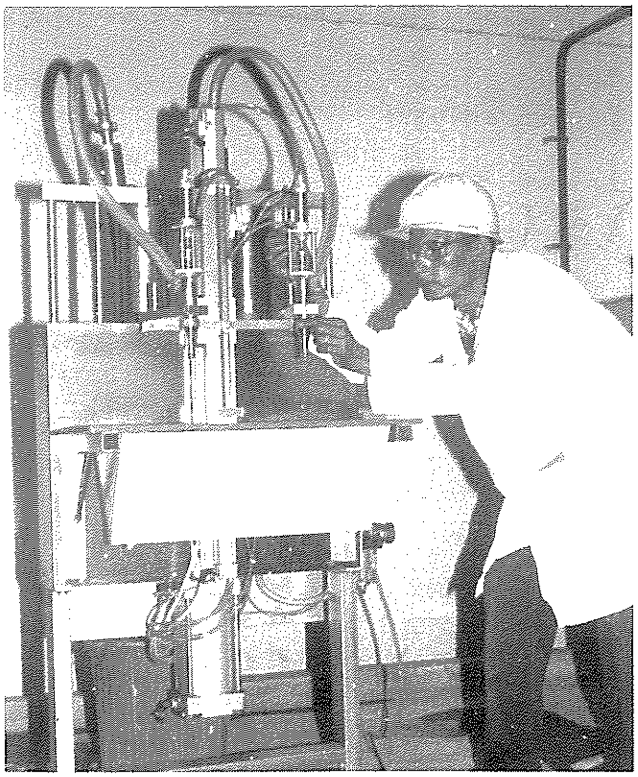
The project on bio-efficacy studies of house-hold formulations against three insect species viz. mosquito house fly and cockroaches was sponsored by M/s. Excel Industries Limited, Mumbai during 1995-96. T bio-assay studies through lab trials is progressing satisfactory.

iii) *Workshop on Pesticide Registration & Regulations*

The unit has conducted a Workshop on Pesticide Registration & Regulations for Indian Pesticide Indus in December, 1997 in which 9 participants participated.

**Pilot Plant**

With the development of newer, user and environment friendly formulations for which technologies have been supplied by the Institute, the industry is now coming forward for semi-commercial development-cum-production of these safer formulation using the Pilot Plant facilities of the Institute. The industry has taken keen interest in the facilities installed in the Pilot Plant and large number of enquiries to use these facilities are forthcoming. The State of art equipments for new formulations are in demand and the Institute at times had to stagger for the leasing of these equipment to the industry.



*AUTO FILLING MACHINE*

The studies completed/being carried out in the Pilot Plant are summarised below:

a) Second phase job Work of semi-commercial development of Captan Water Dispersible granules was carried for M/s. Rallis India who had got the formulation development work done in IPFT laboratories.

b) Job Work for processing special type of filler was carried out for M/s. Ranbaxy India Limited by using Fluid Energy Mill System.

c) In-house Formulation Developments Work undertaken during the year are as follows:

Various Pilot Plant equipments were used by formulation development laboratory for in house formulation development work. The equipments used were Lodige Mixer, Ribbon Blender, Fluid Energy Mill etc.

Jobs Work Anticipated

i) Production of Suspension concentrate formulations from M/s. United Phosphorus Limited, Mumbai.

ii) Water Dispersible Granule formulation from M/s. Sulphur Mills Limited, Mumbai, M/s. United Phosphorus Limited (UPL), Mumbai & M/s Rallis India Limited, Mumbai.

iii) Suspension concentrate formulations of various products from M/s. UPL, Mumbai.

iv) Semi-commercial development of other formulations from M/s. UPL, Mumbai.

***International and National Contacts***

In addition to the various programmes conducted, a number of national and international delegates have visited the Institute to apprise themselves of the facilities available at the Institute for exploring the possibility of collaborative work in different areas of pesticide formulation development.

Noteworthy visits have been made by Mr. Frank P. Brosas, Plant Manager-Director & Industrial Coordinator, M/s. Rhone-Poulenc, Surabaya, Indonesia and Mr. Abu Bakar Tambi, R&D Manager, M/s. DowElanco Asia Pacific Sdn. Bhd., Malaysia. Dr. Bhushan Mandava, UNIDO consultant, also visited the Institute on evaluation mission. There has been business enquiries and mutual interactions with Mr. Husnu Yetkin, Kimyagerler Zirai of M/s. Mucadele Ilaclari A.S. Istanbul. Dr. Jochen Vida, Advisor Hazardous Waste Management working with National Productivity Council on Indo-German Cooperation Project (GTZ) visited the Institute for possible joint collaboration of testing of effluent samples and improvement on effluent treatment plant facilities for pesticide sector in the country.

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

IPFT continued to provide technical backup 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 (RENPAP). Facilities of the TCU were extended to the member countries of RENPAP 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 RENPAP.

*SECRETARY (CHEMICAL & PETROCHEMICAL) INAUGURATING THE HOSTEL*

## Management

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

1. Shri Shantanu Consul, Joint Secretary, Deptt. of Chemical & Petrochemicals.
2. Joint Secretary, Ministry of Agriculture.
3. Shri S. Kabilan, Financial Adviser, Ministry of Chemicals & Fertilizers.
4. Dr. K.V. Raghavan, Director, Indian Institute of Chemical Technology, Hyderabad.
5. Ms. Renu Sahni Dhar, Joint Secretary, Ministry of Health.
6. Shri Rajender Mohan, Chairman & Managing Director, Hindustan Insecticides Limited.
7. Director, Agriculture, Govt. of Haryana, Chandigarh.
8. President, Indian Crop Protection Association.
9. Secretary (Industries ) Government of Haryana, Chandigarh.

10. Mr. Rajju shroff, Managing Director, United Phosphorus Ltd., Mumbai.

11. Dr. K.H. Gharda, Managing Director, Gharda Chemicals Ltd., Mumbai.

12. Director, IPFT and Ex-Office Member Secretary.

13. Dr. S.P. Dhua, Part-time Chairman.

# ACCOUNTS AND AUDIT

## BALANCE SHEET

| Figures for 1996-97 IPFT | RENPAP | TOTAL | HEAD OF ACCOUNT | | Figures for 1997-98 IPFT | RENPAP | TOTAL |
|---|---|---|---|---|---|---|---|
| **LIABILITIES** | | | | | | | |
| - | - | - | Capital Account | 9901074.82 | | | |
| - | - | - | Add. grant in aid | 11000000.00 | | | |
| - | - | - | | 20901074.82 | | | |
| - | - | - | Less Excess of Expn. over income | 2026914.97 | 18874159.85 | | 18874159.85 |
| 2850227.32 | -75103.79 | 2775123.53 | Researve & Surplus | 190950.44 | | | |
| 7050847.50 | 266054.23 | 7316901.73 | Add Excess of Expn. over Income | -561710.20 | | -370759.76 | -370759.76 |
| 4300000.00 | - | 4300000.00 | Corpus Fund | | 4300000.00 | | 4300000.00 |
| 2120000.00 | - | 2120000.00 | Membership fund A/c. | | 2120000.00 | | 2120000.00 |
| | | | **Current Liabilities & Provision** | | | | |
| 365391.50 | - | 365391.50 | Provision for Gratuity | | 418844.50 | | 418844.50 |
| 5993.00 | - | 5993.00 | Provision for Bonus | | 5993.00 | | 5993.00 |
| 902451.75 | - | 902451.75 | Provision for Depreciation | | 1026517.85 | | 1026517.85 |
| 587153.93 | - | 587153.93 | Expenses payable | | 635726.09 | | 635726.09 |
| - | - | - | Staff Advance | | 0.00 | | 0.00 |
| 276.90 | - | 276.90 | TDS | | 137.90 | | 137.90 |
| 691440.00 | - | 691440.00 | Amount payable to UNDP | | 691440.00 | | 691440.00 |
| 435525.39 | - | 435525.39 | Amount payable to HIL(HO) | | 116439.64 | | 116439.64 |
| 4178188.60 | - | 4178188.60 | Amount payable to HIL(R&D) | | 4409740.79 | | 4409740.79 |
| 3700.00 | - | 3700.00 | Amount received from parties | | 8950.00 | | 8950.00 |
| | | | Amount received against | | | | |
| | | | Bio-efficacy Project | | | | |
| | | | Advance fees recieved against | | | | 0.00 |
| | | | CWC Inspection | | | | 0.00 |
| 5800000.00 | - | 5800000.00 | Advance received against CWC project | | 5800000.00 | | 5800000.00 |
| 34149.00 | - | 34149.00 | Amount payable to employees | | 0.00 | | 0.00 |
| 142787.14 | - | 142787.14 | IPFT | | | 444293.06 | 444293.06 |
| | | | Advance against project | | 153000.00 | | 153000.00 |
| **29468132.03** | **190950.44** | **29659082.47** | | | **38560949.62** | **73533.30** | **38634482.92** |

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

-sd-
( N.K. Jain )
ACC

- sd -
for Gulshan Vineet & Associates
Charted Accountants

- sd -

GULSHAN JHURANI
(Partner )

Place : New Delhi
Date: 03th September, 1998

## AS ON 31-03-1998

| Figures for 1996-97 | | | | Figures for 1997-98 | | |
|---|---|---|---|---|---|---|
| IPFT | RENPAP | TOTAL | HEAD OF ACCOUNT | IPFT | RENPAP | TOTAL |
| ASSETS | | | **Fixed Assets (Sch. A)** | | | |
| 3825778.41 | | 3825778.41 | Capital Work in progress | 3829153.41 | | 3829153.41 |
| 2100223.00 | | 2100223.00 | Building | 2100223.00 | | 2100223.00 |
| 109192.62 | | 109192.62 | Plant & Machinery | 275119.22 | | 275119.22 |
| 5472.30 | 5472.30 | 10944.60 | Typewriter | | 5472.30 | 5472.30 |
| 318257.52 | 42691.00 | 360948.52 | Furniture & Fixture | 318257.52 | 42691.00 | 360948.52 |
| 303824.00 | | 303824.00 | Office Equipment | 309296.30 | | 309296.30 |
| | | | Vehicle | 167864.25 | | 167864.25 |
| 562362.56 | | 562362.56 | Laboratory Equipment | 562362.56 | | 562362.56 |
| | | | **Investments (Sch.B)** | | | |
| 4300000.00 | | 4300000.00 | Cor. Fund Inv. A/c. | 4300000.00 | | 4300000.00 |
| 2120000.00 | | 2120000.00 | Membership Fund Invst. A/c. | 2120000.00 | | 2120000.00 |
| | | | **Current Assets** | | | |
| 348469.31 | | 348469.31 | SBI New Delhi Current A/c. | 102360.57 | | 102360.57 |
| 1250027.28 | | 1250027.28 | SBI Dundahera Current A./c. | 221469.04 | | 221469.04 |
| 9644.58 | | 9644.58 | Cash in Hand | 6387.74 | | 6387.74 |
| 13381882.00 | | 13381882.00 | SBI TDR | 16683872.00 | | 16683872.00 |
| | | | Cheques in Hand | 6000000.00 | | 6000000.00 |
| | | | **Advances** | | | |
| 166678.55 | | 166678.55 | Staff, Medical & others | 33729.45 | 285.00 | 34014.45 |
| 21000.00 | | 21000.00 | Festival Advances to Staff | 8000.00 | 500.00 | 8500.00 |
| | | | **Amount Recoverable** | | | |
| 200630.00 | | 200630.00 | Advance to Parties | 35474.00 | | 35474.00 |
| 3074.40 | | 3074.40 | LTC Advance | | | |
| 166710.00 | | 166710.00 | Testing charges | 334480.00 | | 334480.00 |
| 148514.00 | | 148514.00 | Interest receivable | 149712.00 | | 149712.00 |
| 1391.50 | | 1391.50 | Prepaid Expenses | 1087.00 | | 1087.00 |
| 125000.00 | 142787.14 | 267787.14 | Amount receivable from Parties | 557808.50 | 24585.00 | 582393.50 |
| | | | RENPAP | 444293.06 | | 444293.06 |
| **29468132.03** | **190950.44** | **29659082.47** | | **38560949.62** | **73533.30** | **38634482.92** |

Sd/-
Dr. D. Sengupta
Director

## INCOME & EXPENDITURE

### EXPENDITURE

| Figures for 1996-97 | | | | Figures for 1997-98 | | |
|---|---|---|---|---|---|---|
| IPFT | RENPAP | TOTAL | HEAD OF ACCOUNT | IPFT | RENPAP | TOTAL |
| 3293801.45 | 599942.40 | 3893743.85 | Salaries & Wages | 3247363.24 | 689745.40 | 3937108.64 |
| 290114.33 | 9669.56 | 299783.89 | Payment against revision of Grades | 0.00 | 0.00 | 0.00 |
| 239704.00 | 38672.00 | 278376.00 | Institute Contribution to PF | 271057.00 | 26341.00 | 297398.00 |
| 16136.00 | 2505.00 | 18641.00 | Admn. Charges on PF | 17711.00 | 0.00 | 17711.00 |
| 9297.00 | 981.00 | 10278.00 | DLI Charges on PF | 10409.00 | 0.00 | 10409.00 |
| 78.50 | - | 78.50 | Instt's Contribution to Wel. Fund | 0.00 | 0.00 | 0.00 |
| 5993.00 | - | 5993.00 | Bonus | 0.00 | 0.00 | 0.00 |
| **3855124.28** | **651769.96** | **4506894.24** | | **3546540.24** | **716086.40** | **4262626.64** |
| 92172.51 | 8035.20 | 100207.71 | Staff Welfare Expenses | 83340.22 | 4912.65 | 88252.87 |
| 54398.00 | 13328.00 | 67726.00 | Transport Subsidy | 53365.94 | 0.00 | 53365.94 |
| 59197.80 | 11225.60 | 70423.40 | LTC | 61978.20 | 10297.00 | 72275.20 |
| 354082.73 | 41624.71 | 395707.44 | Medical Expenditure | 294590.61 | 22707.10 | 317297.71 |
| 42330.00 | 2053.00 | 44383.00 | Gratuity | 51264.00 | 2189.00 | 53453.00 |
| 100008.80 | 11118.00 | 111126.80 | Leave Encashment | 51146.01 | 6986.90 | 58132.91 |
| 94956.14 | 13418.85 | 108374.99 | Canteen Subsidy | 61370.08 | 14019.10 | 75389.18 |
| 5100.00 | - | 5100.00 | Washing Allowance | 5340.00 | 0.00 | 5340.00 |
| - | 2161.26 | 2161.26 | Contribution to ESI | 0.00 | 10365.90 | 10365.90 |
| **802245.98** | **102964.62** | **905210.60** | | **662395.06** | **71477.65** | **733872.71** |
| - | - | - | Expenses on PMC Meeting | 0.00 | 85374.02 | 85374.02 |
| 75404.65 | 5049.30 | 80453.95 | Travelling Expenses | 106287.30 | 24110.65 | 130397.95 |
| 12396.95 | 741.50 | 13138.45 | Entertainment Expenses | 58999.85 | 2277.25 | 61277.10 |
| 9625.87 | 3486.75 | 13112.62 | Miscellaneous Expenses | 5133.70 | 3876.00 | 9009.70 |
| 63738.37 | 545.40 | 64283.77 | Repair & Maintenance | 84738.86 | 272.70 | 85011.56 |
| 32466.86 | - | 32466.86 | Laboratory Expenses | 46883.47 | 0.00 | 46883.47 |
| 16156.37 | - | 16156.37 | Chemicals | 0.00 | 0.00 | 0.00 |
| 44033.28 | 3925.00 | 47958.28 | Postage, Telegram & Telephones | 30832.38 | 5653.00 | 36485.38 |
| - | - | - | Expenses on Bio-Science Test | 0.00 | 0.00 | 0.00 |
| 27279.60 | 238179.60 | 265459.20 | Rent, Rates & Taxes | 22179.60 | 22179.60 | 44359.20 |
| 1685.00 | - | 1685.00 | Insurance | 7985.50 | 0.00 | 7985.50 |
| 208721.76 | 6076.50 | 214798.26 | Electric Charges Incl. Diesal | 208177.55 | 5589.50 | 213767.05 |
| 36668.63 | 76413.95 | 113082.58 | Printing & Stationary & Other Supply | 53580.03 | 27426.35 | 81006.38 |
| 21909.90 | 33858.03 | 55767.93 | Vehicle Maintenence | 35787.92 | 15166.66 | 50954.58 |
| 120241.15 | - | 120241.15 | Security Charges | 167685.79 | 0.00 | 167685.79 |
| 75.00 | - | 75.00 | Staff Training Expenses | 27326.00 | 0.00 | 27326.00 |
| 3065.00 | - | 3065.00 | Subscription & Membership Fees | 207.50 | 0.00 | 207.50 |
| 2283.38 | - | 2283.38 | Newspaper and periodicals | 2404.37 | 0.00 | 2404.37 |
| 3150.00 | - | 3150.00 | Bank Charges | 1166.00 | 0.00 | 1166.00 |
| 682.50 | - | 682.50 | Cartage & Cooliage | 327.50 | 0.00 | 327.50 |
| 4250.00 | 1750.00 | 6000.00 | Legal Expenses | 3000.00 | 0.00 | 3000.00 |
| 5000.00 | - | 5000.00 | Audit Fees | 5500.00 | 0.00 | 5500.00 |
| 3500.00 | - | 3500.00 | Remuneration to Auditors (other jobs) | 2000.00 | 0.00 | 2000.00 |
| 4560.00 | - | 4560.00 | TA to Auditors | 0.00 | 0.00 | 0.00 |
| 186041.83 | 3382.31 | 189424.14 | Depreciation | 121104.10 | 2962.00 | 124066.10 |
| 1289.00 | - | 1289.00 | Expenses on CWC | 0.00 | 0.00 | 0.00 |
| - | - | - | Consultancy Charges | 18371.00 | 0.00 | 18371.00 |
| 36726.00 | - | 36726.00 | Recruitment expenses | 14150.50 | 0.00 | 14150.50 |
| 17283.14 | 2977.85 | 20260.99 | Debit relating to earlier years | | | |
| - | - | - | Seminar & Workshop Expenses | 0.00 | 77480.42 | 77480.42 |
| - | - | - | Less Income | 0.00 | 0.00 | 0.00 |
| 13560.07 | - | 13560.07 | Expenses on ETP | 0.00 | 0.00 | 0.00 |
| - | - | - | Sample Clearance Charges | 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 | Honorarium | 17000.00 | 0.00 | 17000.00 |
| 7050847.50 | 266054.23 | 7316901.73 | Excess of Income over Expenditure | - | - | - |
| **12660012.07** | **1397175.00** | **14057187.07** | | **5249764.22** | **1059932.20** | **6309696.42** |
| - | - | - | Excess of Exipenditure over Income Brought down | 2031608.97 | 559932.20 | 2591541.17 |
| | | | Debit relating to earlier years | 50544.00 | 1778.00 | 52322.00 |
| | | | | **2082152.97** | **561710.20** | **2643863.17** |

Sd/-
( N.K. Jain )
ACC

## ACCOUNT FOR THE YEAR ENDING 31-03-1998

| Figures for 1996-97 | | | INCOME | | Figures for 1997-98 | | |
|---|---|---|---|---|---|---|---|
| IPFT | RENPAP | TOTAL | HEAD OF ACCOUNT | | IPFT | RENPAP | TOTAL |
| 10000000.00 | 500000.00 | 10500000.00 | Grant in Aid | | - | 500000.00 | 500000.00 |
| - | - | - | Contribution from Industry | | - | - | - |
| - | - | - | Membership Fee Recd. | | - | - | - |
| - | - | - | Less: Transferred to | | - | - | - |
| | | | Membership fee fund account | | - | - | - |
| - | 893475.00 | 893475.00 | Received from UNDP | | - | - | - |
| 698750.00 | - | 698750.00 | Testing Charges Recd | | - | - | - |
| | | | Analytical Lab | | 496980.00 | - | 496980.00 |
| | | | Formulation Lab | | 148285.00 | - | 148285.00 |
| | | | Hiring Charges of Mixer Rec. | | | - | |
| 230664.64 | - | 230664.64 | Seminar & Workshop | | | - | |
| | | | Receipt | 52000.00 | | - | |
| | | | Less Expenses | 46807.75 | 5192.25 | - | 5192.25 |
| - | - | - | Income from Project | | 553000.00 | - | 553000.00 |
| | | | (Formulation Lab) | | | - | |
| 78450.00 | | 78450.00 | Job work PP | 178947.00 | | - | |
| | | | Less Expenses | 10576.50 | 168370.50 | - | 168370.50 |
| | | | Training Fees Recd. | | | - | |
| | | | Indian | | | - | |
| | | | Foreign | | | - | |
| 708822.50 | - | 708822.50 | Interests on Deposits | | 825612.00 | - | 825612.00 |
| 600797.00 | - | 600797.00 | Income from Corpus Fund | | 701972.50 | - | 701972.50 |
| | | | Investment Account | | | - | |
| 298205.00 | - | 298205.00 | Income from MF Invst. A/c. | | 315777.00 | - | 315777.00 |
| | | | Reimbursement by Central Govt. | | - | - | - |
| | | | Expenses of CWC | | - | - | - |
| | | | CWC Inspection Fee Recd. | | - | - | - |
| | | | Subscription Recd. | | - | - | - |
| | | | Hire charges for private car Recd. | | - | - | - |
| | | | Sale of Publication | | - | - | - |
| 41286.93 | 3700.00 | 44986.93 | Credit relating to Earlier years. | | - | - | - |
| | | | Misc. Income | | | - | |
| 2820.00 | - | 2820.00 | Income from AMF Fund | | 2750.00 | - | 2750.00 |
| 216.00 | - | 216.00 | Hire & Rent | | 216.00 | - | 216.00 |
| | | | Excess of expenditure over income | | 2031608.97 | 559932.20 | 2591541.17 |
| **12660012.07** | **1397175.00** | **14057187.07** | | | **5249764.22** | **1059932.20** | **6309696.42** |
| | | | By Credits relating to earlier years | | 55238.00 | 0.00 | 55238.00 |
| | | | By Excess of Expenditure over Income carried forward to Balance Sheet | | 2026914.97 | 561710.20 | 2588625.17 |
| | | | | | **2082152.97** | **561710.20** | **2643863.17** |

Auditor's Report
In terms of our Separate report of even date
For Gulshan Vineet & Associates
Charted Accountants

Sd/-
Gulshan Jhurani
(Partner)

Sd/-
Dr. D. Sengupta
(Director)

Place : New Delhi
Date: 03th September, 1998

## SCHEDULE OF FIXED ASSETS

| Particulars | Gross Block at cost | | | |
|---|---|---|---|---|
| | Cost as at 01/04/1997 | Addtions During the Year | Transfer Durting the Year | Total Cost as at 31-3-1998 |
| **IPFT** | | | | |
| Capital Work in Progress | 3825778.41 | 3375.00 | - | 3829153.41 |
| Office Equipment | 309296.30 | - | - | 309296.30 |
| Plant & Machinery | 109192.62 | 165926.60 | - | 275119.22 |
| Furniture & Fixtures | 318257.52 | - | - | 318257.52 |
| Laboratory Equipment | 562362.56 | - | - | 562362.56 |
| Building | 2100223.00 | - | - | 2100223.00 |
| Vehicle | 0.00 | 167864.25 | - | 167864.25 |
| | **7225110.41** | **337165.85** | | **7562276.26** |
| **RENPAP** | | | | |
| Furniture & Fixture | 42691.00 | - | - | 42691.00 |
| Typewriter | 5472.30 | - | - | 5472.30 |
| | **48163.30** | | | **48163.30** |

## AS ON 31-03-98

| | Depreciation | | | | Net Block | |
|---|---|---|---|---|---|---|
| Rate of Depreciation in % | Upto 31-03-1997 | During the Year 97-98 | Written back during the year | Total Dep. upto 31.3.98 | As at 31-03-1998 | As at 31-03-1997 |
| - | 0.00 | - | - | 0.00 | 3829153.41 | 3825778.41 |
| 4.75 | 37357.13 | 14692.00 | - | 52049.13 | 257247.17 | 271939.17 |
| 4.75 | 71098.40 | 12031.10 | - | 83129.50 | 191989.72 | 38094.22 |
| 6.33 | 37848.75 | 20146.00 | - | 57994.75 | 260262.77 | 280408.77 |
| 4.75 | 254918.52 | 26712.00 | - | 281630.52 | 280732.04 | 307444.04 |
| 1.63 | 490052.03 | 34234.00 | - | 524286.03 | 1575936.97 | 1610170.97 |
| 9.50 | 0.00 | 13289.00 | - | 13289.00 | 154575.25 | 0.00 |
| | **891274.83** | **121104.10** | | **1012378.93** | **6549897.33** | **6333835.58** |
| 6.33 | 8343.92 | 2702.00 | - | 11045.92 | 31645.08 | 34347.08 |
| 4.75 | 2833.00 | 260.00 | - | 3093.00 | 2379.30 | 2639.30 |
| | **11176.92** | **2962.00** | | **14138.92** | **34024.38** | **36986.38** |

## DETAILS OF INVESTMENT OF CORPUS FUND,LIFE MEMBERSHIP FUND AND ASSOCIATE MEMBERSHIP FUND AS ON 31-3-1998

| Deposit With | FDR No. | Date | Amount | Rate of Interest | Due on | Producticity of Payment of Intt. |
|---|---|---|---|---|---|---|
| **CORPUS FUND** | | | | | | |
| SAIL, New Delhi | 3106986 | 29/03/1997 | 600000.00 | 15% | 29/03/2000 | Monthly |
| SAIL, New Delhi | 3107308 | 06/04/1997 | 1100000.00 | 15% | 06/04/2000 | Monthly |
| SAIL, New Delhi | 2926889 | 01/03/1996 | 500000.00 | 15% | 01/03/1999 | Quarterly |
| N.T.P.C. New Delhi | 98400672 | 07/04/1997 | 1600000.00 | 14% | 06/04/2000 | Monthly |
| N.T.P.C. New Delhi | 96400613 | 04/03/1996 | 500000.00 | 14% | 03/03/1999 | Monthly |
| | | | **4300000.00** | | | |
| **LIFE MEMBERSHIP FUND** | | | | | | |
| SAIL, New Delhi | 297140 | 18/05/1996 | 300000.00 | 14% | 18/05/1999 | Quarterly |
| SAIL, New Delhi | 320106 | 21/09/1997 | 700000.00 | 13.5% | 21/09/2000 | Quarterly |
| N.T.P.C. New Delhi | 98400807 | 22/09/1997 | 800000.00 | 14% | 21/09/2000 | Monthly |
| N.T.P.C. New Delhi | 97400625 | 18/05/1996 | 300000.00 | 14% | 17/05/1999 | Monthly |
| | | | **2100000.00** | | | |
| **ASSOCIATE MEMBERSHIP FUND** | | | | | | |
| N.T.P.C. New Delhi | 98400807 | 22/09/1997 | 10000.00 | 14% | 21/09/2000 | Monthly |
| N.T.P.C. New Delhi | 98315664 | 16/03/1998 | 10000.00 | 11% | 15/03/2001 | Quarterly |
| | | | **20000.00** | | | |

## DETAILS OF LIFE MEMBERSHIP FUND ACCOUNT AS ON 31.3.98

| of Receipt | Name of the Organisation | Amount (Rs.) |
|---|---|---|
| 1994 | Unite Phosphorus Limited, Bombay | 1500000.00 |
| 1996 | Gharda Chemicals Limited Bombay | 600000.00 |

## DETAILS OF ASSOCIATED MEMBERSHIP FUND ACCOUNT AS ON 31.3.98

| of Receipt | Name of the Organisation | Amount (Rs.) |
|---|---|---|
| -1994 | Agrosynth Chemicals, Bangalore | 10000.00 |
| -1995 | Pest Control (I) Limited, Bombay | 10000.00 |
| | | **20000.00** |

## DETAILS OF PRIOR PERIOD EXPENSES

| PARTICULARS | Amount (Rs.) |
|---|---|
| Conveyance for 1996-97 | 437.50 |
| Arears of Annual Incerement for 1996-97 paid to Dr. Pandey | 4,386.00 |
| Payment for Electrical material for 1996-97 | 405.50 |
| Arears of DA given to Mr. N.K. Jain | 561.00 |
| Arears of Leave incashment paid to Dr. Pandey for 1996-97 | 1,218.00 |
| Conveyance paid to Mr. R.N. Sarin for 1996-97 | 130.00 |
| Amount paid to Mr. B.R. Sharma for 1996-97 | 323.00 |
| TA paid to Auditors for 1996-97 | 3,965.00 |
| Arears of CL paid to finance Officer | 1,658.00 |
| Institute Contribution of PF from Jan. 1992 to Dec. 1995 | 34,149.00 |
| Administrative & DLI charges on PF Jan. 1992 to Dec. 1995 | 3,311.00 |
| **Total** | **50,544.00** |

## DETAILS OF PRIOR PERIOD INCOME

| PARTICULARS | Amount (Rs.) |
|---|---|
| Recovery of Excess Salary paid to Mr. B.R. Sharma (Ex Finance Officer) | 3,410.00 |
| By testing charges for 1995-96, 1996-97 | 45,375.00 |
| Corpus Fund Interest for 1996-97 | 6,453.00 |
| Total | 55,238.00 |

## SECHEDULE OF INCOME FROM MEMBERSHIP FUND INVESTMENT AS ON 31.03.98

| PARTICULARS | Amount (Rs.) |
|---|---|
| Income from Life Membership Fund Investment | 3,15,777.00 |
| Income from Associate Membership Fund Investment | 2,750.00 |
| Income from Corpus Fund Investment | 7,01,972.00 |

## NOTES ON ACCOUNTS FOR THE YEAR ENDING 31.03.98

1. The PDC assets amounting to Rs. 25, 33, 257 were transferred in the name of IPFT in the previous years. These assets have been merged with the assets of IPFT in the relevant blocks in the current year.

2. The Depreciation on Assets has been provided as per Straight Line Method rates mentioned in Schedule XIV of the Compaines ACT 1956. The Rates are as follows :

| ASSET | 1996-97 | 1997-98 |
|---|---|---|
| Building | 4% | 1.63% |
| Plant & Machinery | 15% | 4.75% |
| Furn. & Fixtures | 6% | 6.33% |
| Office Equipment | 10% | 4.75% |
| Vehicle | - | 9.5% |

3. The Accounting policy reagarding the treatment of Grant-in-Aid has been changed in the current year. In previous years, the grant was treated as income of the year of receipt. However, in the currect year, the grant has been transferred to Capital Account and the operational surplus\deficit for the year has been adjusted from the same.

4. As per the list of assets provided by H.I.L. (R&D), assets worth Rs. 55,638.44 relating to the current year have not been accounted for in the books since the physical verification of the assets is still pending.

5. As per the prevailing practice in previous years, the expenses have been booked on the basis of apportionment by H.I.L. Out of the total expenses of Rs. 35, 98, 304.53 allocated to IPFT, the bifurcation of Expenses is as under :

| | |
|---|---|
| Expenses of employees working 100% for IPFT | Rs. 13,10,857.41 |
| Expenses of employees working 50% for IPFT (29 employees) | Rs. 22,87,447.12 |

Out of the Total expenses of Rs. 22,87,447.12 allocated for employees working 50% for IPFT, the following expenses of employees have not been responded in our account with H.I.L. as per the decision of the F&AC. :

| | |
|---|---|
| Salary & Allowances (For 12 employees) | Rs. 4,68, 560.56 |
| Provision for Gratuity (For 29 employees) | Rs. 60,678.50 |

From the expenses of Rs. 13,10,857.41 for employees working 100% for IPFT, the amount of provision for gratuity of Rs. 39,008 has not been responded in our account with H.I.L.

Out of total expenses of Rs. 3,35,844.93 allocated to RENPAP, Rs. 11,660.88 have not been responded in our account with H.I.L.

6. 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 of Rs. 487710 and charged to Capital work in progress during 1995-96. Bills have not been verified till date.

7. As per list of the equipments provided by HIL. The equipments worth of Rs. 54,590/- have not been identified. However, these assets have been recorded in the books of accounts during 1995-96 although physical verfication of these assets is still pending.

8. No. provision for rent payable to UNDP in the books of R.E.N.P.A.P. has been made during the year although the same had been made for earlier years.

9. Mercantile method of accounting has been following as per accounting policy except for gratuity.

10. The provision for gratuity for IPFT employees has not been made on acturial basis. The provision for gratuity of employees of H.I.L. working for I.P.F.T has not been responded in our account with H.I.L because the expense of gratuity is booked only at the time when the amount of gratuity is actually paid.

**GULSHAN VINEET & ASSOCIATES**
CHARTERED ACCOUNTANTS

B-226A, Greater Kailash-I,
New Delhi - 110 048
Tel. : 6221048
Fax : 91-11-6221026
E-mail : gulshan.gvasso@axcess.net.in

## AUDITOR' 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 31.03.98 and the Income & Expenditure Account for the year ended on that date annexed thereto & report that :-

1. Figures of previous year have been reqrouped & recast wherever necessary.
2. Building Expenses amounting to Rs. 21,00,223/- incurred by PDC prior to inception of IPFT have been capitalised. However building expenses incurred by IPFT amounting to Rs. 38,29,153.41 up to 31.03.98 have been classified as Capital Work in Progress, pending receipt of completion certificate.
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 incroporation of certain expeneses by Institute of Pesticides Formulation Technology is subject to confirmation by Hindustan Insecticides Ltd.
5. Interest on fixed deposit has been taken on accrual basis.
6. As a result of change in accounting policy on grant in aid, the Income has been understated to the extent of Rs. 1,10,00,000/- (One Crore Ten Lacs Only).
7. There has been a change in rate of charging deperciation which have now been charged as per schudale XIV of the Companies Act. Compared to the old rate the expenditure has been understated to the extent of Rs. 120448.90 in the case of IPFT & Rs. 146 in the case of RENPAP.
8. Fixed Assets register does not contain the details of asset transferred from PDC during 1995-96.

Subject to the foregoing and in our opinion & 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 & fair view.

i) In the case of the Balance sheet of the statement of society's affiars as at 31st March 1998.

ii) In the case of Income & Expenditure statement of the excess of Expenditure Over Income of the society for the year ended 31.03.98

FOR GULSHAN VINEET & ASSOCIATES
CHARTERED ACCOUNTANTS

Sd/-
GULSHAN JHURANMI
Partner

Place : New Delhi
Date : 03.09.98

## REPLY TO AUDIT POINTS

| | Audit Point | Reply |
|---|---|---|
| 1. | Figures of previous year have been regrouped and recast wherever necessary. | Call for no comments |
| 2. | Building Expenses amounting to Rs. 21,00.223/- incurred by PDC prior to inception of IPFT have been capitalised. However, building expenses incurred by IPFT amounting to Rs. 38,29,153.41 upto 31-3-1998 have been classified as Capital Work in Progress, pending receipt of completion certificate. | The HUDA authorities have been approached for the transfer of the land in the name of IPFT on which the hostel building has been constructed. The trasfer of the land in favour of IPFT is being pursued with HUDA and as soon as the permission is obtained the completion certificate would be available and the building will be capitalised. |
| 3. | The land on which the hostel building is being constructed belongs to Hindustan Insecticide 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. | CMD HIL, through his letter No. CMD/IPFT/65 dated August 30, 1996 has confirmed demarcation of 17 acres of land in the drawing which includes the land on which the hostel building has been constructed. HIL has written a letter to HUDA authorities in Gurgaon for transferring the title of the land in the name of IPFT and matter is being actively pursued with the HUDA authorities. |
| 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. | This matter is being taken up with the HIL for finalisation. |
| 5. | Interest on fixed deposit has been taken on accrual basis. | Noted |
| 6. | As a result of change in accounting policy on grant in aid. the income has been understated to the extent of Rs. 1.10.00.000/- (One Crore Ten Lacs only) | This is as per the Government directives and calls for no comments |
| 7. | There has been a change in rates of charging depeciation which have now been charged as per Schedule XIV of the Compaines, Act. Companed to the old rates the expenditure has been understated to the extent of Rs. 1,20,448.90 in the case of IPFT and Rs. 146/- in the case of RENPAP. | Noted |
| 8. | Fixed Assets register does not contain the details of asset transferred from PDC during 1995-96. | The details of the assets transferred during 1995 96 have since been obtained and are being included in the fixed assets register. |