INDUSTRIAL R&D PROMOTION PROGRAMME (IRDPP)





INDUSTRIAL R&D PROMOTION 1.2. In-House R&D In Industry **PROGRAMME**

DSIR through its flagship program i.e. "Industrial Research & Development Promotion Program (IRDPP)" has vision to promote Industrial research in the country through Industry and Institution centric motivational measures and incentives creating an enabling environment for development & utilization of novel technologies and innovations.

1.0 Objectives

The broad objectives of the Industrial Research and Development Promotion Programme (IRDPP) are to:

- Bring in-house R&D into sharper focus;
- Strengthen R&D infrastructure industry and Scientific and Industrial Research Organisations (SIROs);
- Promote R&D initiatives of the industry and SIROs;
- Ensure that the contributions made by the in-house R&D centres and SIROs dovetail adequately in the overall context of technological and industrial development.

1.1. Areas of Coverage

The specific areas covered under the component scheme are:

- In-house R&D in Industry.
- Scientific and Industrial Research Organisations (SIROs), and
- Fiscal Incentives for Scientific Research.

Activities and achievements in each of above areas are presented below:

1.2.1 Recognition of In-house R&D Units

A strong S&T infrastructure has been created in the country. This covers a chain of national laboratories, specialized R&D centres, various academic institutions and training centres, which continuously provide expertise, technically trained manpower and technological support to the industry. Various policy measures have been introduced from time to time, to meet the changing industrial and technological requirements of the industry. The Government has been giving special attention to promotion and support to industrial research in industry. Several tax incentives have also been provided which encourage and make it financially attractive for industrial units to establish their own inhouse R&D units.

A scheme for granting recognition to inhouse R&D units of the industry is operated by the DSIR. A number of incentives and support measures are made available to inhouse R&D units of industry to strengthen the technological base. Ministry of Finance issue notifications amending the basic notifications under Customs and Goods & Service Tax (GST). As per the amendments, DSIR recognized & registered in-house R&D units other than hospitals can avail customs duty exemption and concessional GST on their procurements for research.

The in-house R&D units qualifying for recognition are expected to be engaged in research and development activities related to the line of business of the firm such as development of new technologies, design and engineering, process/ product/design improvements, developing new methods of analysis and testing; research for increased efficiency in use of resources such as capital equipment, materials and energy; pollution



control, effluent treatment and recycling of waste products.

The R&D activities are expected to be separate from routine activities of the firm, such as production and quality control. The in-house R&D units should have staff exclusively engaged in R&D and headed by a full-time R&D manager who would have direct access to the chief executive or to the board of directors depending upon the size of the unit. The in-house R&D units are also expected to maintain separate identifiable infrastructure and R&D accounts.

Number of in-house R&D units recognized by DSIR increased steadily from about 100 in 1973 to about 275 by 1975, to over 700 by 1980, around 925 by 1985, over 1100 in 1990, over 1200 in 1995 and thereafter hovering between 1200 to 1250; 1361 in March 2010; 1618 in December 2011, 1767 in December 2012, 1797 in December 2013, 1762 in December 2014, 1800 in December 2015, 1900 in November 2016, 1997 in November 2017, 2052 in November 2018 and 2238 in December 2019. Of these nearly 1806 are in the private sector and the remaining units are in public/joint sector. The last updated 'Directory of Recognized in-house R&D Units' was brought out in December, 2017. This Directory lists 1996 recognized in-house R&D units, giving registration number, name and mailing address of the company, location of the in-house R&D unit(s) and validity of DSIR recognition.

To promote entrepreneurship in biotechnology sector, the three year existence of the company for according short term fresh recognition was relaxed to Biotech Start-ups established in incubation centre or Technology Park with effect from July 2015. DSIR refers the applications received from start-up companies in the biotechnology sector to the Department of Biotechnology (DBT), being the nodal Department for

promoting biotechnology in the country for their views and comments. Based on recommendations received from DBT and keeping the guideline relaxation in view, the application is considered for recognition. Now, the relaxation of three years of existence of the company has been extended to all the sectors.

Detailed guidelines for the recognition of inhouseR&Dunit(s)areavailableonDepartment website. The applications received are scrutinized for their completeness in the DSIR and are then circulated for comments to various other departments/agencies, concerned administrative ministries, MSME, CSIR, ICAR, ICMR, CCRAS, DBT, DC & PC, DoT, DRDO, DIT, DoP and NRDC. The applicant industries seeking recognition are invited for presentation and discussion in DSIR and may be visited by a team of experts and DSIR representatives. applications along with comments from outside agencies, visit reports, and the Department's own evaluation are considered by Inter-Departmental Screening Committee constituted by the Secretary, DSIR. The Committee meeting is scheduled every month to consider the applications and makes recommendations for recognition & registration to the Secretary, DSIR.

The in-house R&D recognition of units by DSIR is considered as the primary requirement for the industry to avail fiscal incentives u/s35(2AB) of the IT Act, 1961. The R&D activity in the company should be well defined and separate from the commercial production and service activities.

During the period under report, the Screening Committee met 12 times and 299 applications received for recognition. During the period under report, the screening committee considered 392 applications including new application and deferred cases. During the period under report, total



cumulative disposal were 330 applications, of which 186 R&D units were granted fresh recognition based on their satisfactory R&D Infrastructure, Qualified Manpower and Programmes; 62 applications were deferred and 144 applications were closed in its present form due to either withdrawal by the company or not eligible for consideration under existing guideline of IRDPP scheme. A statement giving month-wise receipt, disposal and pendency of applications for recognition of in-house R&D units is given at **Annexure 1**.

During the period under report, more than 403 discussions/meetings were held with heads/ representatives of in-house R&D units. Also, expert teams visited a number of in-house R&D units.

1.2.2 Renewal of Recognition

DSIR recognition to the in-house R&D centres of the industry is granted for a period ranging from 2 to 5 years. The companies having the R&D units recognized by the Department are advised to apply for renewal of recognition well in advance (3 months prior to the date of expiry of the recognition). The applications are examined in DSIR by the Research and Review Group (RRG) comprising of representatives from CSIR, NRDC, DSIR and DST constituted by the Secretary DSIR. The RRG takes into account recommendation for renewal of recognition based on satisfactory R&D performance of the R&D centres of industry since the last recognition based on the research indicators like the R&D expenditure, R&D assets, R&D manpower, R&D achievements (new products processes developed, technologies and commercialized, patents filed, research papers published etc.) and the ongoing and future R&D programmes. Sometimes, the RRG may seek clarification/suggestions from the industry for strengthening their R&D activities. After obtaining the necessary information from the industries, the cases which have been accorded DSIR recognition are considered for renewal of recognition.

As of 1st April 2019, 787 in-house R&D units were due for renewal of recognition out of which 706 applications were received. During the period under report, the Research Review group (RRG) met 7 times. Based on the evaluation of the performance of the R&D units, renewal of recognition was granted to 696 R&D units. Total of 81 companies could not be renewed because of the reason that either their application was not received or the R&D performance was not up to the mark. A total of 10 applications are recommended for renewal subject to receipt of information. A statement showing monthwise receipt, disposal and pendency of the cases of renewal of recognition of the R&D units is given in **Annexure 2.**

1.2.3 R&D Expenditure

The R&D expenditure incurred by in-house R&D units in industry has steadily increased. During 1980-81 it was of the order of Rs. 300.00 crores. In 1985-86, it was of the order of Rs. 500.00 crores. It is estimated that the present R&D expenditure of the 2052 recognized in house R&D units is of the order of about Rs.43600.00 crores per annum. The share of public and joint sector is about 20 per cent and that of private sector about 80 per cent. The representative list of Companies spending over Rs. 5000.00 lakhs per annum on R&D, Rs. 500.00 lakhs to Rs. 5000.00 lakhs per annum on R&D and between Rs. 200.00 lakhs to Rs. 500.00 lakhs each per annum on R&D is given in **Annexure 3, 4** and **5** respectively.

1.2.4 R&D Infrastructure

The in-house R&D centers have created



State of art design & simulation facilities, Prototyping, Validation & Testing facilities meeting regulatory requirements and compliance with National/ International Laboratory certifications. The laboratories of In-House R&D centers are equipped with sophisticated analytical equipments, design software's, predictive testing and advanced raw material characterization facilities for carrying out their research activities.

The major equipment include: UW Make System Model-Uw0300A Laser Welding Anechoic Chamber, Gas Chromatograph, Atomic Absorption Spectrometer (AAS), NMR SFC Analyzer, Zeta Potential Analyzer, Automatic Dispersion Analyzer, X-Ray Spectrophotometer, X-Ray Fluorescence Diffractometer, Ozone Chamber, Dissolution UV Spectrophotometer, IR Apparatus, Spectrometer, Particle size analyser, Thermo gravimetric Analyser, Roller compactor, Tablet compressing machine, High shear Granulator, Fluid Bed processor, Lyophilizer, Multi-axis vibration test bench with counters, Cryogenic test chamber (up to -196oC), Thermal Chamber (up to 540oC), Fluorescence Microscope, Digital Storage oscilloscope, Deep freezer (-20 oC), UV Spectroscopy, Emission Analyzer, Differential Scanning Calorimeter-BDS, High Pressure Homogenizer - Nano DeBee 45-1, Photo-Stability Chamber, Accelerated Weathering Tester, FFT analyzer, CAD-CAM facilities, rapid prototype building machines, CNC machines.

1.2.5 R&D Manpower

There has been a steady increase in R&D manpower employed by the in-house R&D units. By 1975-76, about 12,000 R&D personnel were employed by the recognized in-house units and by 1981-82, the figure was over 30,000. The estimated manpower for the 2238 in-house R&D units is over 1,96,315.

1.2.6 Achievements of In-house R&D Units

Some of the R&D achievements reported by the recognised in-house R&D units are listed below:

Agricultural Sciences:

- Development of high yielding and wilt resistance hybrid variety in castor.
- Development of Process for extraction of total curcuminoids (90- 95%) from turmeric.
- Development of synthesizing solvent free sesamin complex 90% extract from sesame seed.
- Development of different hybids Sorghum with Single cut, Multicut, Chinese and Mustard
- Development of superior oil yielding variety of mustard and groundnuts.
- Development and commercilaization of new high yielding, pest tolerent varieties of crops and vegetables; development of superior downy mildew resistant bajra hybrid & maize hybrids.
- Developed hybrids with superior genetics and better disease tolerance in corn, and rice hybrid for rainfed and irrigated segment with better grain and eating quality.
- Development of humic based products, zen-biofertilizers, and new processes such as granular, capsule form of biofertilizers and biofesticides. Improvement achieved in existing production process for capsule granulation.
- Development of heat tolerant high yielding and climate resilient wheat cultivars by using genomics, molecular and physiological information and resource



 Development of marker assisted selection for disease resistance genes in tomato, developing vegetable hybrids DNA fingerprint profiles

Biological / Biomedical Sciences/ Pharmaceuticals:

- Development of a new process for the preparation of Besifloxacin Hydrochloride, Linezolidl, Dydrogensteron and Ulipristal, tolperisone hydrochloride tablets, tacroliums ointment, tacroliums forte ointment, Glatiramer Acetate, Liposomal Doxorubicin, Lanthanum Carbonate and Oral Suspension etc
- Non infringing process devlopment for products such as Bortezomib, Plerixafor, Belinostat, sugmmadex, prednisolone sodium phosphate orally dintegrating tablets, apomorphine injection 10 mg / ml, morphine SR Tablet 30 mg, sugammadex sodium, lenvatinib (Onco), dapagliflozin S-PG solvate, abirateron CIP, ibrutinib new solvate (Onco)
- Development of ayurvedic medicines such as Rasa tablet, Eladi Gutika tablet, Dhatupoushitik choorna and extraction process of Haridrakhanda & Swadishtha virechan choorna
- Development of new products such as glucose estimation kit, HBsAg rapid test kit, saliva collection kit for genetic testing, SNaPshot method for HBV drug resistance mutation analysis, Abacavir hypersensitivity related mutation detection using ARMS PCR
- Development of two Innovative Ophthalmic formulations with a unique Preservative Free Technology such as Olopatadine Ophthalmic Solution, Bromfenac Ophthalmic Solution
- Development of microporous absorption

- technology for amoxicillin & potassium clavulanate tablets;
- Development of next generation sequencing (NGS) based BRCA / BRCA2 gene testing
- Development of monovalent flu vaccine, MERS vaccine, Pneumococcal Conjugate Vaccine- 15 Valent, CRM 197 Diphtheria mutant toxin used a carrier protein in conjugate vaccines; Marek's disease vaccine / developed technology for delivering vaccine in the form of tablets for poultry.

Chemical Sciences:

- Development of Emulsion explosives by jet milling technique (Emuldyne and Emulking), Continuous processes for manufacture of Emulsion and Slurry explosives, Chemical synthesis reactions (esterification).
- Development of customised Calcium Carbonate Filled product to be used in Raffia Polypropylene Woven Sacks industry as an extension of polymer
- Development of a new Filled Transparent masterbatch with higher transparency
- Development of Ship Steam Generation System Throttler Calibrator (Throttler Test Bed).
- Development of chaffs and flares for air force counter measures, air target imitator, smoke flare orange and new processes fine RDX production
- Development of MDA based low viscocity tetray function resin, development of recyclable polyamines named as recyclamines, development of single pack jari coating
- Development of pre-dispersed insoluble sulphur and improvement in existing



- production process for oil spray system with multiple nozles integrated in blending processe to improve oil coating of IS resulting in more uniformity in oil content in final product
- Development of industrial gases such as Development of M-146 monomer, development of M-147 monomer
- Development of fire retardant master batch for PP films.
- Development of low oil absorb besan product, which uses up to 20% less oil when utilized for frying.

Engineering/Information Technology:

- Development of Autopilot and Mission Computer HW based on COTS cards and indigenous chassis/backplane, Lightning Protection for composite Airframe of 2-Seater Aircraft for manned ISR role.
- High pressure projectile launching system valve (Drain Valve)
- Development of flight data acquisitions and analysis system, 3ATI Display Instrument
- Pressure Reducing Station (PRS) to deliver air or gas at constant set pressure and flow when drawn from depleting air or gas bottles on board the vessels
- Development of Quick Closing Globe Valve (QCGV) to close quickly upon receiving signal to stop steam flow to turbine. The required quick closing time 0.3 seconds and achieved less than 0.15 seconds
- Development of API 10,000 PSI Gate Valve with non-penetrated gate
- Several new functional and nano materials for tire compounds to meet stringent requirements of grip, RR and Noise

- Development and commercialization of next-generation telecom technologies such as Ethernet over SDH (EoS), Ethernet Ring Protection (ERPS), Transport MPLS (MPLS-TP) at the global level.
- A 5G-ready converged platform, which innovatively combines fiber/wireless broadband access with packet transport services on the same shelf
- Development of Dual path Inline battery powered ultrasonic Flow meter
- Use of alternate fuel in cement manfacture; beneficiation of low grade limestone; use of mineralizer for improved productivity and thermal efficiency; development of nano materials for cement & concrete and nano cement

1.2.7 Imports Made by In-house R&D Units

The recognized in-house R&D units have imported a variety of equipment, material and reference standards for their R&D activities. These include: Auto die cutting machine, Digital Dev Platform, Emulators EVM, CNC blade bending machine, Electronic Crock meter CMC103886, HPLC, Infra-Red Dyeing Machine, FTIR, LCMS, Gas Chromatography Mass Spectrometry (GCMS), Electron beam welding, Vaccum Furnace, 5-Axis milling, Vertical CNC Milling, Horizontal CNC lathe, Color Spectrophotometer, Homogenizer, Rotovapor, Dissolution Apparatus, UV Spectrophotometer, IR Spectrometer, Particle size analyser, Thermo gravimetric Analyser, Roller compactor, Tablet compressing machine, High shear Granulator, Fluid Bed processor, Lyophilizer, NMR SFC Analyzer etc.



1.3 Scientific And Industrial Research Organisations

1.3.1 Recognition of Scientific and Industrial Research Organizations (SIROs)

The DSIR had launched a scheme of granting recognition to SIROs in 1988. The SIROs recognized by DSIR are eligible for customs duty exemption and concessional GST under notification no. 51/96-customs dated 23.07.1996; notification no. 24/2007-customs 01.03.2007; notification 43/2017-customs dated 30.06.2017; notification no. 45/2017-central tax (rate) & 47/2017-integrated tax (rate) dated 14.11.2017; notification no. 9/2018-central tax (rate), notification no. 09/2018-union territory tax (rate) ¬ification no. 10/2018-integrated tax (rate) dated 25.01.2018; and state tax (rate) as applicable and all notification, as amended from time to time.

The DSIR has brought out Guidelines for Recognition of SIROs, which gives procedural details and application proforma for seeking recognition under the SIRO Scheme. Functional SIROs having broad based governing council, research advisory committee, research personnel, infrastructural facilities for research, well defined, time bound research programmes and clearly stated objectives of undertaking scientific research, are considered eligible for recognition by DSIR. The investments of surplus funds not needed for immediate research should be in accordance with the Income-tax Act, 1961.

Applications for seeking recognition under the SIRO scheme are considered in DSIR by an Inter- departmental Screening Committee with members from Council of Scientific and Industrial Research (CSIR), Indian Council of Medical Research (ICMR), Indian Council of Agricultural Research (ICAR), Indian Council of Social Sciences Research (ICSSR) and University Grants Commission (UGC). The recommendations of the Screening Committee are put up for approval of Secretary, DSIR. The recognition is effective from the date of the Screening Committee meeting. Retrospective approval is not granted.

During the period January 2019 to December 2019, the Screening Committee met 12 times and recommended 65 cases for recognition as SIROs. These include 43 cases in the Natural and Applied Sciences, 1 case in the area of Agricultural Sciences , 1 case in the area of Social Sciences and 20 cases in the area of Medical Sciences. The sector-wise list of these SIROs is furnished at **Annexure - 6.** Out of the 65 recognized SIROs, 44 SIROs were issued registration certificates for obtaining customs duty exemptions and GST waiver.

1.3.2. Renewal of Recognition of SIROs

Recognition granted to SIROs is for duration ranging from 1 to 3 years. The SIROs are advised to apply for renewal of recognition well in advance (3 months prior to the date of expiry of recognition). Such applications received for renewal of recognition are examined by Research Review Group (RRG) by involving representatives from ICAR, ICMR, CSIR and ICSSR depending on the area of research. Based on the evaluation made by the RRG, renewal of recognition is granted to SIROs. During the period January 2019 to December 2019, RRG met 04 times and recommended 217 SIROs for renewal of recognition beyond 31.03.2019. Out of the 217 recognized SIROs, 116 SIROs were issued registration certificates for obtaining customs duty exemptions and concessional GST. At present, there are 732 SIROs duly recognized by DSIR.

The SIROs have employed qualified scientists



and researchers and have also established good infrastructural facilities for research. They have developed new processes, procedures, techniques and technologies and also filed several patents. They have also organized seminars/ symposiums/ workshops and published research papers / reports / books.

1.3.3 R&D Analysis of SIROs

A study based on detailed survey on the significance and achievements of the research programs/activities, R&D infrastructure, R&D achievements/S&T interventions, industrial linkages and collaborations of DSIR recognized SIROs in different research areas was conducted by DSIR. The task of collecting, compiling, analyzing publishing the Report cum compendia was outsourced by DSIR to The Energy and Resources Institute (TERI), New Delhi. A questionnaire comprising of 19 points was designed for each of the 04 subject areas and circulated to all SIROs recognized by DSIR. The response from 595 SIROs was received; of these 251 were in the area of Natural and Applied Sciences, 233 were in area of Medical Sciences, 37 were in the area of Agricultural Sciences and 74 werein the area of Social Sciences. The output of the study has been compiled in two parts: (i) R&D Analysis of SIROs: A Study Report and (ii) Compendium of R&D Profile of SIROs published in two Volumes.

It has been found that SIROs have played a major role to leverage science and technology for national development and societal transformation. They have significantly contributed to National missions such as Make in India, Skill India, Clean India, Digital India, etc. The key findings of the study of the 595 SIROs are: R&D manpower engaged for research: about 45,000; R&D expenditure (during 2016-17): Rs. 10,604

crores; Research Projects completed (during 2016-17): 6714; Research Publications (2014-17): National – 50755, International - 24417; Patents awarded till 2017: Indian - 1018, Foreign - 837; Number of Technologies Commercialized (till 2017): 2309; Technical Collaborations: National - 698, International - 514; Societal Relevance: Number of SIROS aligned with National Missions viz. Clean India-104, Digital India-43, Skill India-69, Swastha India-112, Make In India-64, Startup India-4, Clean Energy-52, Smart Cities Mission-5. Majority of SIROs recognized by DSIR are self-sustaining organizations and are actively contributing to increase private investment in R&D and translating their R&D outcomes into commercial products.

1.4 Fiscal Incentives for Scientific Research

Government has evolved, from time to time, fiscal incentives and support measures to encourage R&D in industry and increased utilization of locally available R&D options for industrial development. New incentives to encourage investments in R&D by industry are announced in the Union Budget. Fiscal incentives and support measures presently available include:

- i. Income-tax relief on R&D expenditure (capital & revenue);
- ii. Weighted tax deduction U/s 35(2AA) of IT Act 1961 for sponsored research programs in approved national laboratories, universities and IITs;
- iii. Weighted tax deduction u/s 35(2AB) of IT Act, 1961 on In-house R&D expenditure for any company engaged in the business of biotechnology or in any business of manufacture or production of any article or thing not being an article or thing specified in the list of the eleventh schedule of IT Act, having R&D



- facility approved by Secretary, DSIR.
- iv. Customs Duty exemption on capital equipment, spares, accessories and consumables imported for R&D by approved institutions/SIROs;
- v. Customs Duty exemption on specified goods (comprising of analytical and specialty equipment) for use in pharmaceutical and biotechnology sector;
- vi. Accelerated depreciation allowance on plant and machinery set-up based on indigenous technology;
- vii. Customs Duty exemption on imports for R&D projects supported by Government.

Information on some of these fiscal incentives implemented by DSIR is given in the following paragraph.

1.4.1 Depreciation Allowance on Plant and Machinery Setup Based on Indigenous Technology

Secretary, DSIR, Ministry of Science and Technology, is the Prescribed Authority to certify expenditures where higher rate of depreciation is to be allowed for the plant and machinery installed for the manufacturing of products using indigenous know-how as per provisions of rule 5(2) of IT Rules. Guidelines have been issued for making application for obtaining the aforesaid certificate. All such applications received are examined in the department, and discussions and visits by experts to verify the claim are made to the plants by expert teams. Based on a detailed examination, certificates in deserving cases are issued for eligible expenditure.

During the year, one certificate involving Rs.88.30 Crores during FY 2016-17 on cost of plant and machinery was issued by DSIR. Details are given at **Annexure 7**.

1.4.2 Reference on expenditure on scientific research under Section 35 (3) of Income-Tax Act, 1961.

Section 35(3) of Income-tax Act, 1961 provides that if a question arises as to whether and, if so, to what extent any activity constitutes or constituted or any asset is or was being used for scientific research, the Central Board of Direct Taxes would refer the question to the Prescribed Authority. Chief Commissioner Income-tax in concurrence with Secretary, DSIR is the Prescribed Authority for deciding such cases.

1.4.3 Customs Duty Exemption to Recognized& Registered SIROs

All SIROs recognized and registered by DSIR (other than hospitals) are eligible for customs duty exemption on import of equipment/instruments and their spares and consumables; under notification No. 51/96-Customs dated 23.07.1996, 24/2007-Customs dated 01.03.2007 & No. 43/2017-Customs dated 30.06.2017, amended from time to time. The department was issuing essentiality certificates to SIROs for obtaining customs duty exemption. As per notification No. 24/2007-Customs dated 01.03.2007, the Director or Head of the Institute/organization is empowered to sign the essentiality certificate.

1.4.4 Concessional GST to Recognized & Registered SIROs

The SIROs recognized by DSIR (other than hospitals) are eligible for concessional GST on import of equipment/instruments including computers, apparatus, accessories their spares consumables; and and computer software, CD-ROM, recorded microfilms, microfiches, tapes, notification nos. 45/2017-central tax (rate) & 47/2017-integrated tax (rate) dated 14.11.2017;



Notification No. 9/2018-central tax (rate), Notification No. 09/2018-union territory tax (rate) & Notification No. 10/2018-integrated tax (rate) dated 25.01.2018; and state tax (rate) as applicable and all notification, as amended from time to time. As per the notification no. 45/2017-central tax (rate) dated 14.11.2017, the Director or Head of the Institute/organization is empowered to sign the essentiality certificate.

1.4.5 Customs Duty Exemption and concessional GST benefits to Recognized & registered in-house R&D units

Ministry of Finance has issued Notification No. 51/96 - Customs dated 23.07.1996; Notification No. 24/2007 - Customs dated 01.03.2007; Notification No. 43/2017 - Customs dated 30.06.2017; Notification No. 45/2017 - Central Tax (Rate) & 47/2017 - Integrated Tax (Rate) dated 14.11.2017; Notification No. 9/2018 - Central Tax (Rate); Notification No. 09/2018 Union Territory Tax (Rate) & Notification No. 10/2018 - Integrated Tax (Rate) dated 25.01.2018; and State Tax (Rate) as applicable and all notification as amended from time to time.

As per the above amendments, all DSIR recognized in-house R&D units other than hospitals can avail customs duty exemption and concessional GST on their procurements for research purposes. All the eligible inhouse R&D units recognized by DSIR have been issued the certificates of registration.

1.4.6 Other Benefits Availed by the Recognized R&D Units

The Department provides assistance to recognized in-house R&D units in a number of ways, such as cases of industrial R&D units requiring allotment of special controlled materials for R&D, permission to export of specialized products reserved for small scale

industries by medium scale industries for test marketing in other countries and disposal of imported R&D equipment/instruments and pilot plant produce are examined for making suitable recommendations to concerned agencies.

1.4.7 Registration of Public Funded Research Institutions, Universities etc.

Public funded research institutions, universities, IITs, IISc., Bangalore; Regional Engineering Colleges (other than a hospital) are eligible for availing concessional customs duty exemption on import of equipment, spares and accessories and consumables for research purposes through a simple registration with the DSIR. The heads of the public funded research institutions / organizations duly registered with DSIR can certify the R&D goods for customs duty exemption vide Notification No. 43/2017-Customs dt. 30.06.2017 and corrigendum dated 22.07.2017-Custom Notification no. 43/2017 dt 30.06.2017. Ministry of Finance has amended the main notification No. 51/96-Customs dt.23.07.1996 from time to time.

Coinciding with the presentation of Union Budget for the year 2004, Ministry of Finance amended the notification No. 51/96-customs vide notification No. 28/2003-Customs dt.1.3.2003. As per the amendment, departments & laboratories of central government and state governments (other than a hospital) are not required to register with DSIR for availing the concessional customs duty exemption. They can clear the consignments by producing a certificate from the Head of the institution certifying that the said goods are required for research purposes only. Another significant change in the notification is that Regional Cancer Centres have been included in the list of institutions eligible for DSIR registration for



importing goods for research purposes at a concessional rate of customs duty.

The Union Government of India enacted 'The Constitution (101st Amendment) Act, 2016 w.e.f.16th September 2016, as introduction of Goods and Services Tax required amendments in the constitution to concurrently empower the Centre and States to levy and collect Goods and Services Tax (GST). Central Government vide Notification No. 03/2017-Central Tax, dt. 19-06-2017 has notified Central Goods and Services Tax Rules, 2017 w.e.f. 22nd June 2017. The introduction of Central Goods and Services Tax Act, 2017(No. 12 of 2017) on 1st July, 2017 was a very significant step in the field of Indirect Tax Reforms in India. introduction of CGST Act, 2017 (No.12 of 2017) from 1st July, 2017, import of goods would be treated as inter-state supplies and would be subject to integrated tax (IGST) in addition to the applicable customs duties. For latest update visit http://www.cbec. gov.in/htdocs-cbec/gst/index.

Central Government vide Notification 47/2017-Integrated Tax (Rate) dt. 14.11.2017 and Notification No. 45/2017- Central Tax (Rate) dt. 14.11.2017, Notification No. 45/2017- Union Territory Tax (Rate) dt. 14.11.2017, as amended from time to time has granted concessional GST benefits to Public funded research institutions, universities, IITs, IISc., Bangalore; Regional Engineering Colleges (other than a hospital).

Application for registration / renewal of registration of Public Funded Research Institutions (PFRIs) and details about the schemes are available on Department website (www.dsir.gov.in). The complete applications are considered by an Inter-departmental Screening Committee constituted by the Department for considering the requests from various institutions. Presently the

committee is chaired by a former Secretary of DSIR.

The Screening Committee met twice during the period under report and considered 20 applications received from various public funded research institutions. During the period under report, 14 registration certificates were issued to such public funded research institutions for availing Customs Duty exemption on import of scientific equipment, spares and accessories, consumable items and concessional GST benefits for purchases for Scientific Research Purposes. There are about 570 PFRIs registered by DSIR. The registration to public funded research and other institutions mentioned in the notification is granted for maximum period of five years. The registered institutions are advised to apply for renewal of registration well in advance of the date of expiry of the registration.

During the period under report, 75 institutions were due for renewal of registration. The department received 60 renewal applications. These were processed on individual files and approval of Competent Authority was obtained and 57 renewal certificates were issued.

1.4.8 Approval of In-house R&D Centres under Section 35(2AB) of I.T. Act 1961

In order to encourage R&D initiatives of industry, the finance bill 1997 introduced a sub section (2AB) in section 35 of the IT Act, 1961. The provision introduced initially was for select sectors of industry i.e. drugs, pharmaceuticals, electronic equipment, computers, telecommunication equipment, chemicals and provided weighted deduction of 125 per cent on expenditure on in-house research and development facility as approved by the prescribed authority i.e. Secretary, DSIR. Subsequently, a number of



other sectors were added to the list of eligible sectors. From the year 2009 the benefits have been extended to all sectors of industry with a select list of non-priority items. Rate of weighted tax deduction was raised from 125 per cent to 150 per cent subsequent to the year ending March, 2000. The rate of weighted tax deduction was further enhanced to 200% from 1st April 2010. Initially the provision was introduced up to 31st March, 2000. The provision was extended from time to time initially till 31st March, 2005 and then up to 31st March, 2007, further up to 31st March 2012. In the Union Budget 2012, the provision was extended up to 31st March 2017. In the Union Budget 2016, the provision has been further extended up to 31st March 2020 and the rate of weighted tax deduction has been lowered from 200% to 150% from 1st April 2017.

During the period under report (May - December 2019), new approvals were accorded to 93 companies in Income Tax prescribed Form 3CM under Section 35(2AB) of Income Tax Act, 1961. A list of companies approved under Section 35(2AB) of IT Act, during the year is furnished in **Annexure-8**. Further, the detailed R&D expenditure of the approved companies were also examined and 263 reports valued at Rs.8171.00 crores were forwarded to CCIT (E) in Form 3CL as prescribed in IT Act.

