GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH
LOK SABHA
STARRED QUESTION NO.*244
(TO BE ANSWERED ON 16th DECEMBER 2015)

ALLOCATION OF FUNDS FOR RESEACH PROJECTS

***244. : SHRI KIRTI VARDHAN SINGH**

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Council of Scientific and Industrial Research has taken up many research projects for new inventions in various fields for the benefit of the common people;

(b) if so, the details of major projects undertaken by CSIR in various States, including Uttar Pradesh during the last three years; and

(c) the budget allocated and spent on the projects in the States, State - wise during the above period?

ANSWER

MINISTER OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES

(Dr. Harsh Vardhan)

(a),(b)&(c): A Statement is laid on the Table of the House.

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THE REPLY IN PURSUANCE OF THE STATEMENT MADE IN ANSWER TO THE LOK SABHA STARRED QUESTION NO. *244 BY THE HON'BLE MINISTER OF SCIENCE & TECHNOLOGY AND EARTH SCIENCES.

Part wise reply:

(a) Yes, Madam.The Council of Scientific and Industrial Research (CSIR) has been providing the S&T knowledgebase needed for the benefit of the common people. The efforts are focused at bringing in desired S&T interventions for improving the quality of life, removing drudgery and augmenting income of the people.

CSIR has developed technologies for: food and food processing; water; healthcare; building and construction; environment and sanitation; rural roads; cultivation and processing economic plants; farm machinery; leather; pottery etc. The technologies developed have been gainfully utilized in several states and contributed for improving quality of life and economic growth of common people.

CSIR has developed a number of technologies on water, ranging from source finding to mapping of water resources, from quality assessment to enhancing potability of water and from recycling to waste water treatment. The technology for community scale RO desalination plants has been developed. The RO plants in various states (Rajasthan, Tamil Nadu, Delhi, West Bengal, Gujarat etc.) have been set up based on the technology. Further, technology for arsenic removal from water has been developed and based on the same common people have benefitted in the state of West Bengal. Also high flux hollow fibre membrane based technology for water disinfection and purification at affordable cost has been developed and is being used at commercial level.

CSIR has developed KrishiShakti, a small range (11.2 hp) diesel engine tractor. The technology of the same has been transferred and manufacturing has been initiated in West Bengal. The tractor was launched in Delhi on 20th November 2014. During the launch five tractors were handed over to farmers. The KrishiShakti has enabled farmers with small land holdings for effective tilling.

A cost effective and efficient anti tarnishing lacquer has been developed for brasswares, helping the Moradabad brass cluster. The developed lacquer is very efficient to prevent tarnishing for long

durations. Also, energy efficient brass melting furnace has been developed which is smoke-free coal furnace, handles more charge (brass melt), reduces gas emission and pollution by 80% and consumes 20% less coal. It is user friendly as artisans can adopt this furnace without changing their current practices and like the present furnace, this modified version can also be repaired by the artisans. The knowhow has been transferred for commercial use.

CSIR has developed an indigenous substitute of Ukraine clay in granito ceramic tiles which has reduced the Ukraine clay requirement from 20% to about 1%, reducing thus the foreign material import and associated costs. This has made major economic difference and benefitted small and medium scale enterprises in Gujarat.

A food processing unit has been set up at CSIR-Centre for High Altitude Biology (CSIR-CeHAB) in the remote tribal region of Lahaul and Spiti. A brining unit has been designed and prototype developed for the preservation of locally and abundantly produced peas and cauliflowers. The knowhow was showcased at the District level Tribal Fair at Keylong and training organized for the benefit of progressive farmers in the area of food and food processing: making novel products from Buckwheat; and also brining of the peas which is a major crop.

CSIR has worked with the Indian Council of Agricultural Research (ICAR) for the development of highly priced rice variety, Samba Mahsuri, resistant to the serious Bacterial Blight (BB) disease. This new variety called, improved Samba Mahsuri has been released for commercial cultivation and is being very much appreciated by farmers growing rice.

CSIR in collaboration with Rice Research Station, Chinsurah, West Bengal has developed novel low grain arsenic accumulating rice genotype. The variety which is named as "Muktashree" will be soon released for cultivation in vast arsenic affected belts of West Bengal.

A novel variety of Ashwagandha with high root yield of 15 quintal/hectare has been developed and released to farmers which would help farmers with more earnings. The Ashwagandha has useful

applications in pharma applications as anti-inflammatory, anti-stroke and anti-arthritis drug adjuvant.

CSIR has developed a new variety 'CIM-Jyoti' of Ocimum through intensive breeding efforts for high yield of herb and essential oil with desirable quality of higher citral (68-75%). This variety will produce citral in a short duration of 70-80 days. It also fits in crop rotation/intercropping between wheat and paddy and with other vegetable crops of small farmers. Leaves of this variety can also be used in lemon tea.

The people of North East India make a number of leather products but they were unable to reach the market and earn desired profit due to lack of aesthetic appeal and standardisation. There was a need to transform this knowledge into wealth by increasing the value of the products without losing its real essence. CSIR carried out a comprehensive survey in the north eastern region. Based on the inputs from the survey, new ranges of products were developed. The handbags are crafted and designed with the ethnic materials of the northeast and the inspirations are derived from Ornaments, Dresses & Artifacts adorned by tribal folks of the northeast India. The products were displayed in various national/ international fairs and have attracted many enquiries. This has benefited the women entrepreneurs of North Eastern region.

CSIR has set up post-harvest centres in Mizoram (Aizawl) and Arunachal Pradesh (Pashighat). These centres are focused at helping the local farmers in the region for value addition to their agricultural produce. The centres house technology for high efficiency drying and processing of ginger, cardamom, turmeric, chilies etc. The farmers are able to sell their produce at 20 – 25% higher price to the processing centres set up. The CSIR Post Harvest Technology Centres would generate direct employment to about 300 people.

CSIR has introduced and commercialized Lilium cultivation in Lahaul and Spiti region of Himachal Pradesh. CSIR has played a catalytic role in the promotion of commercial floriculture in Himachal Pradesh. The transfer of agro-technology of Lilium in the region was realized by the flower growers through sale of cut flowers at Delhi flower market. Over 3000 farmers are engaged in floriculture in Himachal Pradesh.

CSIR has developed knowhow for easy cultivation of economically important seaweed, namely *Kappaphycusalvarezii*, which was disseminated to the fishing community in coastal regions of Tamil Nadu as supplementary activity to existing fishing activities. Presently, more than eight hundred Self-Help Groups (SHGs) are engaged in seaweed farming in the region. It provides a regular and sustainable income source for women, with each of them earning on an average Rs. 5000/- per month for a period of eight months in a year. CSIR has further developed integrated process for simultaneous recovery of two products from the harvested fresh seaweed, namely, hydrocolloid of commercial use and liquid biofertilizer for use by farmers.

CSIR has been adopting villages to promote employment generation and income augmentation. It has thus catalyzed commercial cultivation of Geranium in Uttaranchal and Lavender in Jammu & Kashmir through community participation. In these end to end missions, farmers have been trained not only for cultivation of Geranium and Lavender but also for extraction of oil, augmenting thus their income. Likewise CSIR efforts through development of niche Mentha varieties and their propagation for mass cultivation are noteworthy. The efforts have led to economic growth and have enabled India to acquire a world leadership position in Menthol mint oil production and export.

CSIR efforts for socio-economic development had led to: empowering people of the Kashmir Valley through creation of aromatic plant industry; development of bio-inoculants for enhancing plant productivity and its dissemination to the farmers in Uttar Pradesh in the partnership with the State Government on a very large scale and it has enhanced agriculture productivity; and development of mushroom technology, its transfer and training which has benefitted economically the rural women in North East States. CSIR has also launched the Jammu Aroma Arogya Gram (JAAG) Yojana for deployment of CSIR agri-technologies and handholding the farmers of J&K for cultivation of medicinal and aromatic plants in the state.

CSIR has been contributing in the area of healthcare. Some recently developed technologies/interventions benefitting the common people include: Streptokinase (a drug for cardiovascular disease); Risorine (a cost effective bioavailability enhanced anti-tuberculosis drug); Battery operated hand-held MicroPCR (towards affordable and point of care

disease diagnostics for Tuberculosis, Malaria, Dengue, Chikungunya, Hepatitis B and H1N1); nonClonableID technology for medical product authentication; Diagnostic system for affordable, point of need testing to manage HIV and TB; Novel molecular diagnostics for eye diseases; and eHealth Center (eHC, a platform for the fourth paradigm of science, data-intensive discovery, while bringing affordable healthcare services to the doorstep of people). CSIR has recently developed a novel, safe poly-herbal formulation BGR-34 as a safe hypoglycaemic agent for management of diabetes conditions which has recently been commercialized by an industry.

CSIR has played a major role in protecting the traditional knowledge by creating a Traditional Knowledge Digital Library (TKDL). The TKDL contains information in 5 international languages, i.e. English, Japanese, Spanish, French and German concerning 2.93 lakh medicinal formulations in Ayurveda, Unani and Siddha. Through the TKDL access agreement concluded with European Patent Office (EPO, 34 Member States), US Patent & Trade Mark Office (USPTO), Canadian Intellectual Property Office (CIPO), IP Australia, Japan Patent Office (JPO), United Kingdom Patent and Trademark Office (UKPTO), German Patent Office (GPO), Chile Patent Office and Malaysian Patent Office, examiners of these offices can utilize TKDL for search and examination of Intellectual Property applications filed but cannot make any third party disclosure. TKDL is recognized globally as a model for protection of traditional knowledge.

(b) **Details of major R&D projects undertaken by CSIR Laboratories(situated in various states), during the last three years under the 12th Five Year Plan are as follows:**

S. No.	Name of Nodal Laboratory and location	Title of the Project
1.	CSIR-Advanced Materials and Processes Research Institute, Bhopal	Novel Energy Effective Metallic Materials for Automotive and General Engineering Application
2.		Design and Development of Thermo Responsive & Magnetic Shape Memory Materials and Devices for Engineering Applications
3.	CSIR-Central Building Research Institute, Roorkee	Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment
4.		Innovative Materials and Technologies for Next Generation Green buildings
5.	CSIR-Centre for Cellular and Molecular Biology, Hyderabad	Plant-Microbe and Soil Interactions
6.		Epigenetics in Health and Disease
7.		Conservation of endangered animals of India: Molecular Genetics and Reproduction Approaches
8.		Biology of Ageing and Human Health
9.		Plant Breeding, Genomics and Biotechnology
10.	CSIR-Central Drug Research Institute, Lucknow	Factors Governing competent gamete production and reproductive dysfunction
11.		Towards holistic understanding of Complex Diseases: Unraveling the Threads of Complex Diseases
12.		New Approaches Towards Understanding of Disease Dynamics and to Accelerate Drug Discovery
13.		Emerging and re-emerging challenges in infectious diseases: Systems based drug design for infectious diseases
14.		Anabolic Skeletal Targets in Health and Illness
15.	CSIR-Central Electrochemical Research Institute), Karaikudi	Multifunctional electrodes and Electrolytes for Future Technologies
16.	CSIR-Central Electronics Engineering Research Institute, Pilani	Very High Power Microwave Tubes : Design and Development Capabilities
17.		Research Initiative on Nano Devices and Nano-Sensors
18.		Advanced Microsensors and Microsystems : Design, Development and Applications
19.		Advanced Facility for Nano Electronics
20.	CSIR-Central Food Technological Research Institute, Mysore	New initiatives to boost agriculture productivity through maximizing pre- and post-harvest yields
21.		Wellness through Foods and Nutraceuticals
22.		Lipidomics Center
23.		Creation of Advanced Research Facility in Molecular Nutrition
24.	CSIR-Central Glass and Ceramic	Development of Novel CSIR Technologies for Manufacturing Tailored and Patient-Specific Bioceramic Implants and Biomedical Devices at

S. No.	Name of Nodal Laboratory and location	Title of the Project
	Research Institute, Kolkata	Affordable Cost
25.		Advanced ceramics materials and components for energy and structural application
26.		Leadership in Specialty Glass and Optical Fiber Technologies
27.	CSIR-Central Institute of Medicinal & Aromatic Plants, Lucknow	Chemical Biology of Ocimum and other Aromatic Plants
28.	CSIR-Central Institute of Mining & Fuel Research, Dhanbad	Clean Coal Technology
29.		Development of a technology for optimal extraction of locked-up coal from underground mines using artificial pillars
30.		Development of underground coal gasification technology in India
31.		Development of suitable design methodology for extraction of coal at greater depths (>300 m) for Indian geomining conditions
32.	CSIR-Central Leather Research Institute, Chennai	Zero Emission Research Initiative for Solid Wastes from Leather
33.		Science and Technology Revolution in Leather with a Green Touch
34.		Research Initiative for Waterless Tanning
35.		Design Innovation for Smart Material Transformation Yeaning Leather Life Style Products
36.	CSIR-Central Mechanical Engineering Research Institute, Durgapur	Robotics and Micro Machines
37.		Autonomous Underwater Robotics
38.		Intelligent devices and smart actuators
39.	CSIR-Fourth Paradigm Institute, Bengaluru	Advanced Research in Engineering & Earth Sciences: Data intensive modelling and crowd sourcing approach
40.	CSIR-Central Road Research Institute, New Delhi	Development and Application of Technologies for Sustainable Transportation
41.		Evaluation of Economic Loss Due to Idling of Vehicles at Signalized and Mitigation Measures
42.		Development of Indian Highway Capacity Manual
43.	CSIR-Central Scientific Instruments Organisation, Chandigarh	Advanced Instrumentation Solutions for Health Care and Agro- based Applications
44.		Opto-Mechatronics Technologies for Next Generation Sensors and Applications
45.	CSIR-Central Salt & Marine Chemicals Research Institute, Bhavnagar	Membrane & Adsorbent Technology Platform for Effective Separation of Gases and Liquids
46.		Potassic (K) fertilizer Technology to Empower the Nation
47.		High Purity Salt & Recovery of Valuable Metal Ions from Marine Resources

S. No.	Name of Nodal Laboratory and location	Title of the Project
48.	CSIR-HQ-Council of Scientific & Industrial Research, New Delhi	S&T interventions to combat malnutrition in women and children
49.	CSIR-Institute of Genomics & Integrative Biology, Delhi	Centre for Cardiovascular and Metabolic Disease Research
50.		Genome Dynamics in cellular organization, differentiation and enantiostasis
51.		CSIR-NCL-IGIB Joint Research Initiative: Interfacing Chemistry and Biology
52.		Wellness Genomics Project - Understanding genomic signatures of healthy living in Indian population
53.		Towards Understanding skin Cell Homeostasis
54.		Effective Application of Community Health Efforts through New Age, IT Based Modes
55.		Visualisation of Organisms in Action
56.	CSIR-institute of Himalayan Bioresource Technology, Palampur	Plant Diversity: Studying adaptation biology and understanding/exploiting medicinally important plants for useful bioactives
57.		Introduction, domestication, improvement and cultivation of economically important plants
58.		Establishment of Centre for High Altitude Biology
59.		Process and Products from Himalayan Region and their toxicological evaluation
60.	CSIR-Indian Institute of Chemical Biology, Kolkata	Understanding supra molecular ensembles and machines
61.		Host Interactome analysis: Understanding the Role of Host molecules in Parasitic Infection
62.		Neurodegenerative diseases: Causes and Corrections
63.		Therapeutics of Chronic Obstructive Pulmonary Disease (COPD) and Related Respiratory Disorders
64.		Bio-energetic Disorders: A multi-model approach to monitoring and management
65.		CSIR-Mayo Clinic Collaboration for Innovation and Translational Research
66.	CSIR-Indian Institute of Chemical Technology , Hyderabad	Biocatalysts for Industrial Applications & Greener Organic Synthesis
67.		Inherently Safer Practices for Industrial Risk Reduction
68.		Organic reactions in generating innovative and natural scaffolds
69.		Non-Infringing chemistry and engineering for pharmaceuticals
70.		Metabolic profiling of human body fluids by MS and NMR
71.		Screening molecules in lead exploration

S. No.	Name of Nodal Laboratory and location	Title of the Project
72.		Development of Sustainable Processes for Edible Oils with Health Benefits from Traditional and New Resources
73.		Development of Sustainable Waste Management Technologies for Chemical and Allied Industries
74.		Intelligent Coatings
75.		Development of Innovative Technologies for Strategic Flurochemicals
76.		Development of Novel Vaccine Adjuvants
77.		Affordable Cancer Therapeutics
78.		Advance Drug Delivery System
79.		Augmentation of Analytical Research Facilities
80.	CSIR-Indian Institute of Integrative Medicine, Jammu	Medicinal Chemistry for stem cell biology and regenerative medicine
81.		Nurturing a new Pan-CSIR drug pipe line: high intensity preclinical, clinical studies on lead candidates
82.	CSIR-Indian Institute of Petroleum, Dehradun	Energy Efficient Technologies
83.		Biomass to Energy
84.		Catalysts for Sustainable Energy
85.		New generation lubricants and additives
86.		Research Initiative for Low Emissions
87.		Waste to Wealth - Waste plastics
88.		Advanced Carbon Materials
89.	CSIR-Indian Institute of Toxicology Research, Lucknow	Integrated NextGen approaches in health disease and environmental toxicity
90.		Nanomaterials: Applications and Impact on Safety, Health and Environment
91.	CSIR- Institute of Minerals and Materials Technology, Bhubaneswar	Minerals to Metals for Sustainable Planet
92.		Processing of natural gemstones for aesthetic improvement and value addition
93.		Centre for Special Materials
94.	CSIR-Institute of Microbial Technology, Chandigarh	Man as a Superorganism: Understanding the Human Microbiome
95.		Centre for BIOtherapeutic Molecule DISCOVERY
96.		Genomics and Informatics Solutions for Integrating Biology
97.		Multidirectional approaches for molecular and systems level understanding of regulatory networks in pathogenic microbes
98.		Drug Discovery: Bugs to Drugs Programme
99.		Expansion and Modernization of the Microbial Type Culture Collection and Gene Bank
100.	CSIR-National Aerospace	Technology Solutions for Micro Air Vehicle Development
101.		Avionics and Flight Controls Civil Aerospace Technologies
102.		Advanced Structural Technologies for Aircraft

S. No.	Name of Nodal Laboratory and location	Title of the Project
103.	Laboratories, Bengaluru	Aerodynamics and Propulsion Technologies for Next Generation Civil Aircraft
104.		Transport Aircraft Design Bureau
105.		Augmentation and Refurbishment of National Trisonic Aerodynamic Facilities
106.	CSIR-National Botanical Research Institute, Lucknow	Bioprospection of plant resources and other natural products
107.		Genomics of Medicinal Plants and Agronomically Important Traits
108.		Root Biology and its correlation to sustainable plant development and soil fertility
109.	CSIR-National Chemical Laboratory, Pune	Hydrogen Energy: Overcoming materials challenges in PEMFC towards generation, separation , storage and conversion of hydrogen
110.		Innovate, develop and up-scale modular, agile, intensified and continuous processes and plants
111.		Catalysts for Specialty Chemicals
112.		Encapsulated Microorganisms for Environmental Protection
113.		Creating intellectual property and capabilities for the development of improved security features and substrates for the Indian currency note.
114.		A Multi-Scale Simulation and Modeling Approach to Designing Smart Functional Materials for use in Energy, Electrochemistry and Bio-mimetics
115.		Centre for Surface and Interface Science Research
116.		Nuclear Magnetic Resonance Centre for Advanced Research
117.		National Repository of Molecules
118.		Up gradation of Facilities/National Repository of Molecules and National Collection of Industrial Micro Organisms Resource Centre
119.	CSIR-National Environmental Engineering Research Institute, Nagpur	Centre of Excellence: Waste Utilization and Management
120.		National Clean Air Mission
121.		Clean Water: Sustainable Options
122.	CSIR-North-East Institute of Science and Technology, Jorhat	Natural Products as Affordable Healthcare Agents
123.		Environmental Research Initiative for Paper and Process Industry
124.		Advanced Polyolefins
125.		North East Exploration for Pharmaceutical
126.		CSIR Advanced Analytical Facility for North East
127.	CSIR-National Geophysical Research Institute, Hyderabad	Geodynamic and Earthquake generating processes in NE India and Andaman Subduction Zone

S. No.	Name of Nodal Laboratory and location	Title of the Project
128.		Hazard due to Earthquakes and Tsunami in the Indian region
129.		India Deep Earth Exploration Programme
130.		Shallow subsurface imaging of India for resource exploration
131.	CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram	Sustainable Technologies for the Utilization of Rare Earths
132.		Development of functional foods and their formulations for potential health benefits of common man
133.		Molecules to Materials to Devices
134.		Speciality Materials based on Engineered Clays
135.	CSIR-National Institute of Oceanography, Goa	Ocean Science Towards Forecasting Indian Marine Living Resource Potential
136.		Geological processes in the Indian Ocean - Understanding the input fluxes, sinks and Paleoceanography
137.		Geo-scientific investigations for deciphering the Earth's internal processes and exploration of energy resources
138.		Indian Aquatic Ecosystems: Impact of Deoxygenation, Eutrophication and Acidification
139.		Analyses and Harnessing of Marine Biodiversity for Bioremediation of Aquaculture and Industrial Effluents
140.	CSIR-National Institute of Science Communication and Information Resources, New Delhi	CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure
141.		CSIR--Wide Consortium Access to Online Information Resources
142.		Vulnerability assessment and development of adaptation strategies for climate change impact with special reference to coasts and island ecosystems of India
143.	CSIR-National Institute of Science, Technology and Development Studies), New Delhi	Indian S&T and Innovation Policy
144.	CSIR-National Metallurgical Laboratory, Jamshedpur	Development of Zero Waste Technology for Processing and Utilization of Thermal Coal
145.		Development of Magnesium Metal Production Technology
146.	CSIR-National Physical Laboratory, New Delhi	Development of Advanced Materials for Next-Generation Energy- Efficient Devices
147.		Advanced Quantum Research and Innovation with Ultra Small Systems
148.		Measurement for Innovation in Science & Technology
149.		Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains (IGP) and Himalayan

S. No.	Name of Nodal Laboratory and location	Title of the Project
		Regions
150.		Research and Development on Single Trapped Ion based Frequency Standard
151.	CSIR-Structural Engineering Research Centre, Chennai	Innovative Technologies for Health Assessment and Damage Mitigation of Structures
152.		Engineering Sustainable Materials and Structures Action Plan I: Sustainability Through Eco-Balancing
153.		Engineering Sustainable Materials and Structures Action Plan II: Sustainability Through Nano-Technology and Bio-Mimetics
154.	CSIR-Traditional Knowledge Digital Library, Ghaziabad	Analysis and Monitoring of patent applications in International Patent Office for preventing misappropriation of India's Traditional Knowledge
155.		Traditional Knowledge Digital Library 2020
156.	CSIR-Unit for Research Development of Information Products, Pune	Patinformatics
157.		Chembioinformatics for Drug Discovery
158		Open Science and Open Innovation Infrastructure

(c) The budget allocated to CSIR laboratories (situated in various States) and spent, for pursuing R&D projects, during the last three years is given in the following table:

Rs. in Lakh

S. No.	State	Laboratory/ Institute	2012-13	2013-14	2014-15
1.	Andhra Pradesh/ Telangana*	1. CSIR-Centre for Cellular & Molecular Biology (CSIR-CCMB), Hyderabad*	2028.262	4619.283	2697.414
		2. CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad*	3119.030	4779.359	3924.713
		3. CSIR-National Geophysical Research Institute (CSIR-NGRI), Hyderabad*	1037.903	1897.843	1466.951
2.	Assam	1. CSIR-North East Institute of Science & Technology (CSIR-NEIST), Jorhat	1088.623	1847.52	1775.256
3.	Chandigarh	1. CSIR-Central Scientific Instruments Organisation (CSIR-CSIO), Chandigarh	713.261	1908.739	1478.038
		2. CSIR-Institute of Microbial Technology (CSIR-IMTECH), Chandigarh	1349.631	3154.203	2826.169
4.	Delhi	1. CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi	330.015	993.012	687.938
		2. CSIR-Hq. - Council of Scientific & Industrial Research, New Delhi	566.792	632.755	770.950
		3. CSIR-Institute of Genomics & Integrated Biology (CSIR-IGIB), New Delhi	1929.256	4478.842	3055.437

Rs. in Lakh

S. No.	State	Laboratory/ Institute	2012-13	2013-14	2014-15
		4. CSIR-National Institute of Science Communication And Information Resources (CSIR-NISCAIR), New Delhi	1682.921	1902.580	2038.203
		5. CSIR-National Institute of Science, Technology and Development Studies (CSIR-NISTADS), New Delhi	108.630	186.386	212.330
		6. CSIR-National Physical Laboratory (CSIR-NPL), New Delhi	2769.245	5291.345	954.541
5.	Goa	1. CSIR-National Institute of Oceanography (CSIR-NIO), Goa	8442.746	6681.921	2497.760
6.	Gujarat	1. CSIR-Central Salt & Marine Chemicals Research Institute (CSIR-CSMCRI) Bhavnagar	393.68	1733.810	1850.014
7.	Himachal Pradesh	1. CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT), Palampur	780.536	1871.798	1526.797
8.	Jammu & Kashmir	1. CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu	1142.207	2888.612	1531.192
9.	Jharkhand	1. CSIR-Central Institute of Mining & Fuel Research Institute (CSIR-CIMFR), Dhanbad	338.330	1151.936	1555.932
		2. CSIR-National Metallurgical Laboratory (CSIR-NML), Jamshedpur	259.017	477.223	264.500
10.	Karnataka	1. CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysore	384.014	2016.975	1286.058

					Rs. in Lakh
S. No.	State	Laboratory/ Institute	2012-13	2013-14	2014-15
		2. CSIR-National Aerospace Laboratories (CSIR-NAL), Bengaluru	6952.786	2867.279	1791.318
		3. CSIR-4th Paradigm Institute (CSIR-4th PI)	123.198	1722.946	741.698
11.	Kerala	1. CSIR-National Institute of Interdisciplinary Science & Technology (CSIR-NIIST), Thiruvananthapuram	1238.099	1925.487	1816.992
12.	Madhya Pradesh	1. CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI), Bhopal	144.048	434.465	333.597
13.	Maharashtra	1. CSIR-National Chemical Laboratory (CSIR-NCL), Pune	4082.418	4653.532	3711.802
		2. CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur	366.701	1289.305	1040.484
14.	Odisha	1. CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT), Bhubaneshwar	856.879	1837.345	758.113
15.	Rajasthan	1. CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani	1024.624	3139.843	1971.327
16.	Tamil Nadu	1. CSIR-Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi	1062.922	3518.878	2899.023

					Rs. in Lakh
S. No.	**State**	**Laboratory/ Institute**	**2012-13**	**2013-14**	**2014-15**
		2. **CSIR-Central Leather Research Institute (CSIR-CLRI), Chennai**	**518.296**	**2029.377**	**1662.936**
		3. **CSIR-Engineering Research Institute (CSIR-SERC), Chennai**	**1270.877**	**3723.455**	**1736.014**
17.	**Uttrakhand**	**1. CSIR-Central Building Research Institute (CSIR-CBRI), Roorkee**	**136.574**	**776.360**	**791.725**
		2. CSIR-Indian Institute of Petroleum (CSIR-IIP), Dehradun	**1046.169**	**1962.413**	**1237.899**
18.	**Uttar Pradesh**	1. **CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow**	**2092.485**	**3877.217**	**6549.829**
		2. **CSIR-Central Institute of Medicinal & Aromatic Plants, (CSIR-CIMAP), Lucknow**	**644.640**	**1158.239**	**1287.008**
		3. **CSIR-Indian Institute of Toxicological Research (CSIR-IITR), Lucknow**	**594.934**	**1041.242**	**973.597**
		4. **CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow**	**1150.543**	**2256.561**	**1838.568**
		5. **CSIR- Human Resource Development Centre**	**475.693**	**405.725**	**363.967**
19.	**West Bengal**	**1. CSIR-Central Glass & Ceramic Research Institute (CSIR-CGCRI), Kolkata**	**898.845**	**3231.834**	**2133.743**
		2. CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur	**687.750**	**2042.249**	**2063.957**
		3. CSIR-Indian Institute of Chemical Biology (CSIR-IICB), Kolkata	**1640.441**	**3848.855**	**2809.277**