

2017-18

CSIR-NISTADS

ANNUAL REPORT

National Institute of Science, Technology and Development Studies
Council of Scientific and Industrial Research,
New Delhi



Annual Report

2017-18



**CSIR-National Institute of Science, Technology and
Development Studies**

Pusa Gate, K.S. Krishnan Marg, New Delhi

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Contents

1. From The Director's Desk	1
2. About CSIR-NISTADS	3
3. Research Projects	5
• Sponsored Projects	7
• OLP/MLP/Internal Projects & Activities	10
4. Academy of Scientific and Innovative Research (AcSIR)	17
5. Publications	21
6. Presentations in Conferences	24
7. Staff News	25
8. Workshops, Conferences, and other events Organised	29
9. Lectures organised	38
10. Project Monitoring & Evaluation (PME)	43
11. Library	44
12. IT Infrastructure	45
13. Management Committee	46
14. Right to Information Act (RTI) Cell	47
15. Budget	49
16. हिंदी की गतिविधियां	53
17. Staff List	57

From The Director's Desk



Since its inception, the CSIR-National Institute of Science, Technology and Development Studies (CSIR-NISTADS) has provided a critical link, and is the only CSIR laboratory to serve as a channel between social, natural and engineering sciences in CSIR as well as within the broad research and development (R&D) system of the country. The year 2017-18 has seen several impactful efforts along these lines, which are reflected in this Annual Report.

At the core of NISTADS' mandate is research and activities associated with science, technology, innovation and development. The focus has been on translational projects to expedite the transfer of benefits from R&D to the general populace and the Indian industry. It has also been realized that policy advisories need to be strictly evidence-based to ensure their acceptability, and preferably with a demonstrated proof-of-concept for establishing the suitability of their implementation. The NISTADS has initiated several projects along these lines.

The year saw NISTADS leading major R&D projects like 'Technology Empowerment of North East with Water, Energy and Communication Solutions and Other Critical Areas (TENE WECS)'; five project development workshops were organized under this initiative to train and catalyze AICTE institutes in the North East to develop technology-oriented projects; several high-level meetings with experts from CSIR and other laboratories were also organized. Another important project has been on a compilation of characteristics of medicinal plants for therapeutic uses. Other important projects included 'Reduction of atmospheric CO₂ over Delhi through non-disruptive and sustainable Carbon Sequestration: System design and proof of concept,' 'Societal problems in India - building R&D ecosystem based on technology landscaping' and 'Analysis of extreme pollution events in Delhi.' The results of these projects are now available as reports and brochures.

A major new initiative at NISTADS has been the NISTADS Technology Innovation Programme (NTIP). The goal of NTIP is essentially to develop functional prototypes of technology innovations as a proof-of-concept for implementable policy advocacy. Three major developments under NTIP have been 'Smart Irrigation System for Water Efficient Agriculture (WASIS)', 'Air Quality-linked Traffic Advisory System (AQTAS)' and 'Holistic Health with Herbs (Ayur Vatica)'. All these prototypes are at Technology Readiness



Level (TRL) five and above, and are now working in semi-operational environments.

The energetic doctoral and students programme at CSIR-NISTADS continues, with students pursuing doctoral degrees in research areas like Quantitative Research Methodology; Science, Technology & Innovation Policy and Intellectual Property Rights. At the same time, a large number of school students visited NISTADS under the Jigyasa programme; the NTIP prototypes have been very popular with the school students.

The Institute remains committed to generating and disseminating knowledge on science, technology, innovation and related topics and their applications along with policy implications. During 2017-18 period, NISTADS organized several major national and international workshops, meetings and roundtables. One of the international workshops held during this period was on ‘Science, Technology, Innovation and Management for Water Sustainability’, and an international training-cum-workshop was also held on ‘Innovation for Sustainable Development: Perspectives, Policies and Practices in South Asia’. A national workshop on ‘Application of Information Sciences in Technology Development and Marketing’ was also organized with CSIR-NISCAIR as co-organiser. A function was held in February for the launch of NISTADS

Tracks in Policy Research (NTPR) and the release of the book titled ‘Policy Perspective on Innovation and Sustainable Development’.

NISTADS has also expanded its horizon in the field of research and development with new initiatives like Interfacing Science with Traditional Knowledge, Predictive Social Modelling and Industrial and Business Data Analytics. Exciting results are already beginning to emerge from these new initiatives.

Proper R&D infrastructure always holds the key to quality research. With the revival of the NISTADS Engineering Unit, a number of improvements could be accomplished in terms of renovations of NISTADS’ ageing infrastructure. At the same time, NISTADS data portal is now hosted on the new website of the Institute.

I thank the Director General, CSIR, and other divisions of CSIR headquarters for their valuable inputs and support. I would also like to thank our collaborators, including our CSIR labs, for their involvement and support in our various endeavours. Finally, I extend my thanks to all the members of CSIR-NISTADS for their active participation in the Institute’s activities.

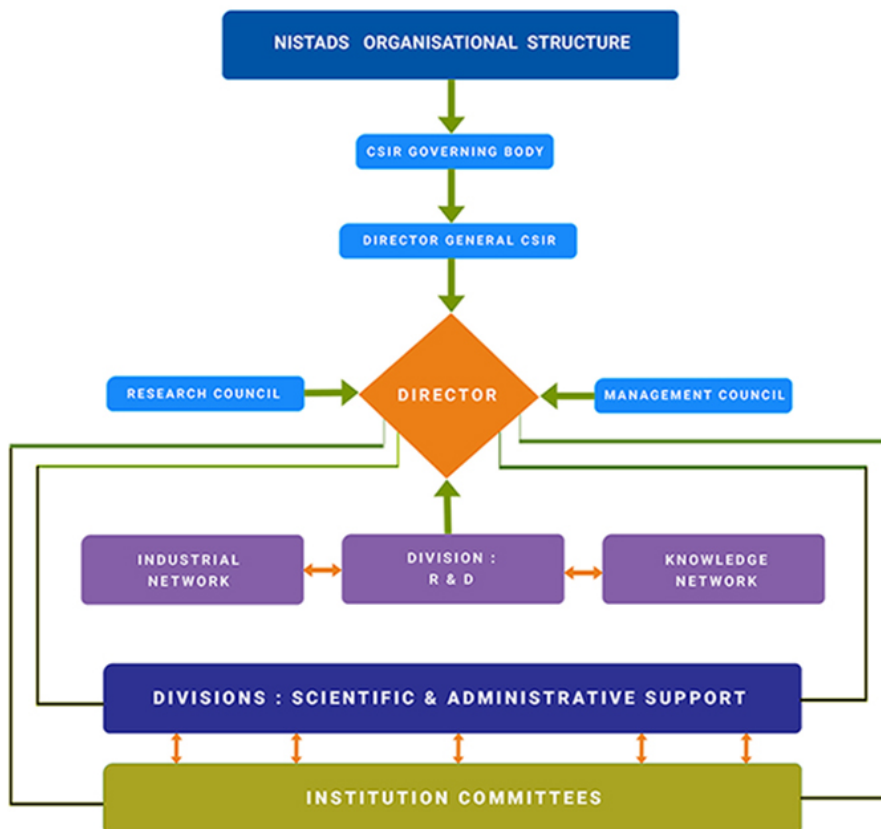
Dr Prashant Goswami

ABOUT CSIR-NISTADS

The roots of CSIR-National Institute of Science, Technology and Development Studies (CSIR-NISTADS) go back to August 1973 with the Council of Scientific and Industrial Research (CSIR) setting up Centre for the Study of Science, Technology and Development. On September 30, 1980, the Governing Body of the CSIR approved that the Centre “should function as an autonomous Centre with a separate budget”. Its objectives “would continue to be the same”, but it “will be autonomous, headed by a scientist of the rank of a Director of a National Laboratory, with its own infrastructure”. September 30, 1980 is therefore the foundation day of the Institute (even though the present name came into effect on April 1, 1981).

The CSIR-NISTADS is dedicated to studying various aspects of the interface among science, society and the state and is exploring continuously the edge existing between science, technology and society.

Currently, the faculty consists of 16 members, drawn from a range of academic disciplines. This intellectual diversity is the mainstay of the Institute. Research students from different universities enrolled in the Institute to get their PhD degree. CSIR-NISTADS has a vibrant visiting scholars programme, under which researchers from India and abroad are encouraged to spend quality time at the Institute.





The Institute is involved in the following research fields:-

- Water
- Rural areas
- S& T mapping
- High Technology
- Entrepreneurship
- Public Science and Technology

The Institute's strengths

- Interdisciplinary research teams
- Multi-discipline in faculty
- Long research experience
- Field research: designing/collecting primary data
- Students, visitors network partners Indian as well as international
- Access to CSIR resources, technologies, knowledge and people

- World class IT Facility
- World-class computerized library: access to several thousands of research journals and database

The Institute has proven competencies in these areas

- Water-resources, economics, management and life science
- Entrepreneurship and Micro-entrepreneurship development
- Innovation-Strategy and management
- Intellectual property issues
- Knowledge management; R&D management
- Law, technology and economics
- Science policy
- Resource mapping/geography



RESEARCH PROJECTS





SPONSORED PROJECTS

A SCIENTOMETRIC APPROACH TO STUDY ARSENIC, FLUORIDE, NITRATE AND OTHER HEAVILY METAL IN DRINKING WATER DURING THE 1995-2015 PERIOD: AN OUTLOOK TO TREATMENT ALTERNATIVES FOR REMOVAL OF CONTAMINATION.

Sponsoring Agency: Department of Science and Technology, New Delhi

Team: Dr. Madhulika Bhati (PI)

The objective of the analysis is to identify the trends of research on the removal of contaminants from water, from the year 1995 to 2015.

- Understand knowledge structures both quantitatively and visually by integrating keyword analysis and social network analysis of scientific papers.
- Comprehensive study of technologies available worldwide for complete removal of these contaminants from drinking water;
- Catalogue the international and national collaboration of countries undertaken for studying and identifying the linkage of research interest;
- Study the authorship pattern, degree of collaboration, highly productive authors in the field of study
- Identify the important stakeholders in the public and private sector.

TECHNOLOGY EMPOWERMENT OF NORTH EAST WITH WATER, ENERGY AND COMMUNICATION SOLUTIONS AND OTHER CRITICAL AREAS (TENE WECS)

Sponsoring Agency: AICTE, New Delhi

Co-ordinators: Dr Vipin Kumar and Dr. Madhulika Bhati

This is a project under the MoU between All India Council for Technical Education and CSIR-NISTADS to create an effective Academia-R&D interface platform for training, research and outreach in Water, Energy and Communication Solutions (TENE-WECS) with the following objectives:

- To develop projects and programmes with high science and technology inputs with active participation of local institutions
- To empower institutions in the north-eastern region through training, project development and project management for improved quality of research in critical areas like energy, water and communication.
- To catalyze research, innovation and social entrepreneurship
- Synergy for technology adaptation/diffusion at grassroots through organization of outreach activities.

Project Component # 1 Proposal Developments by the North East Institutes

- To catalyze and facilitate the process, CSIR-NISTADS has organized three proposal development workshops in phased manner. The aim of these workshops have been to develop quality proposals by the institutions followed by evaluation and review of these proposals as per specification provided by AICTE.
- CSIR-NISTADS facilitated the participated AICTE approved institutes in the development of proposals as per specified format provided by AICTE. 56 institutes have participated in these

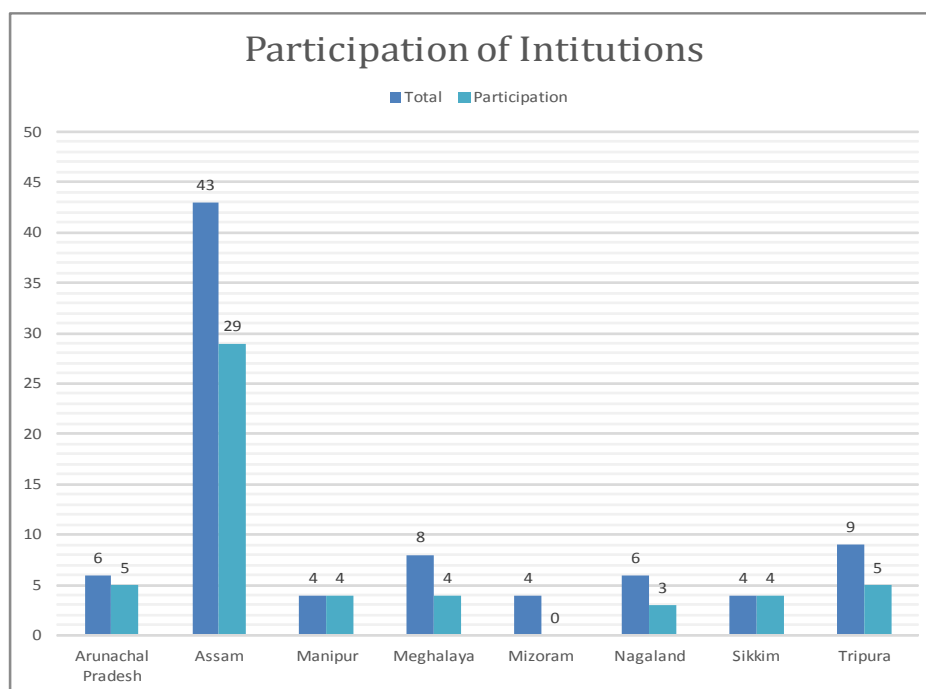


workshops from the different states of
North East. Statistics of Participation

matrix indicated as follow:

Table 1. State wise Institutes participation involvement in the workshops

Statistics		Participation			
State	Total	First	Second	Third	Total
Arunachal Pradesh	6	2	0	3	5
Assam	43	12	8	9	29
Manipur	4	1	0	3	4
Meghalaya	8	0	4	0	4
Mizoram	4	0	0	0	0
Nagaland	6	2	1	0	3
Sikkim	4	2	2	0	4
Tripura	9	0	4	1	5
Total	84	19	19	16	54





Project Component # 2 Supply of Site Characterization Data for Installation of Water, Energy, Communication and other Technology Solutions in the North East

Team: Dr. L. Pulamte (PI) and Dr. Kasturi Mandal (Co-PI), Dr. Anil Kumar (Member).

The project is designed to provide technology solutions in critical sectors such as water, energy and communication to the 88 technical institutions in North East identified by AICTE by developing and implementing projects through training and active participation of these institutions.

The objective of the project component is to collect site and locational data of the institutions involved so as to enable the assessment and determination of the possibilities of implementing technology solutions in the chosen sectors. Accordingly, the project team developed a questionnaire while data from the AICTE-approved technical institutions were supplied by the Bureau of Research on Industry & Economic Fundamentals, New Delhi, which was selected through tender.



OLP/MLP/Internal Projects & Activities

PILOT STUDY ON COMPILATION OF CHARACTERISTICS OF MEDICINAL PLANTS FOR THERAPEUTIC USES

Team: Dr. Suman Ray (PI) and Dr. Kasturi Mandal (Co-PI)

Wide acceptance of herbal health care is due to several reasons-diversity, flexibility, easy accessibility, relative low cost, low levels of technological input, relatively low side effects and growing economic importance etc. However, this requires genuine need for developing awareness and ease of access to Traditional Medical Systems in India. Medicinal plants are resource of new drugs and many of the modern medicines are produced indirectly from plants. Preliminary study on compilation of characteristics of medicinal plants for therapeutic uses was conducted based on survey data collection using primary/secondary data sources. An access to the herbs will reduce the cost of travel for medical care, also save time to travel to hospitals which are not accessible to people in remote areas. In addition, herbs are of great values as it provides preventive health care. CSIR-NISTADS has developed a prototype Ayur Vatika with 100 herbs, an herbal vertical garden, which is an attempt to bring the herbal healthcare to homes.

DISASTER VULNERABILITY AND RESILIENCE

Team: Sandhya Wakdikar (PI)

The natural, accidental and technological disasters have become more widespread,

more difficult to manage, and more discriminatory in their effects. Certain populations are more vulnerable to the effects of disasters. Policy and planning decision-makers need to focus on the impact of human settlement patterns and land use decisions, and the risks that the technologies can have on the vulnerable populations. However, to ensure safety and promote equity, they also must be familiar with the social dynamics that are present at each stage of the disaster management cycle. This study tries to give a better understanding of the breadth of factors that give rise to disaster vulnerability, and lays a basis for assessing and managing the social processes associated with disaster policy and planning.

Data was collected on 30 various disasters, including (A) natural, (B) man-made, invasive/aggressive, and (C) accidental/management/maintenance-related disasters. The source of disasters, the geographical coverage, effect and probability of occurrence with return period give the overall details of the disasters. A detailed study on the vulnerability to each disaster with preparedness, measures and resilience is being done. Data has also been collected on the number of vulnerable people, vulnerable units and vulnerable industries with recovery cost and recovery time, and capacity and ability to recover from the disasters. Status of disaster management and the S&T solutions available nationally and internationally with India will help in assessing the preparedness if a disaster strikes.



REDUCTION OF ATMOSPHERIC CO₂ OVER DELHI THROUGH NON-DISRUPTIVE AND SUSTAINABLE CARBON SEQUESTRATION: SYSTEM DESIGN AND PROOF OF CONCEPT

Team: Dr. P. Goswami (Nodal Officer), Ms Sandhya Wakdikar (PI) and Dr Madhulika Bhati (Co-PI)

The annual CO₂ emission over Delhi is nearly 15 million tonnes (with about 5-6% annual increase) and is a major source of poor air quality and contribution to global warming. The CSIR NISTADS has been exploring techno-policy options that would provide an implementable and sustainable solution to the problem. Based on the earlier studies at the CSIR and other background studies, the CSIR-NISTADS took up a translational project to develop a proof-of-concept to stabilize, and, if possible, reduce atmospheric carbon as a part of its applied policy research.

Under the project, optimal growth conditions under representative urban (Delhi) soil conditions have been used in an open environment. Implementability is established by developing and maintaining field plots through inter-institutional arrangements among CSIR NISTADS, CSIR NPL and CSIR IGIB, functional for past about one year. In terms of effectiveness, measurements show that the percent of carbon sequestered in the field plots in Delhi is comparable to that in farm environment in Bangalore.

A report based on the initial carbon measurements has been prepared with a specific policy advocacy and sent to reviewers for their critical review and recommendations. One year plantation cycle was completed in July 2017 and six

schedules for carbon measurements were done; the data is being analysed for the final report preparation.

CSIR-NISTADS PUBLIC OUTREACH PROGRAMME (NPOP)

Team: Dr.Mohd. Rais (PI)

An Integrated Outreach Human Resource Development Programme: Enhancing Skills in S&T Policy Making

With rapid changes that are taking place in S&T, there is an urgent requirement for appropriate communication of these developments to various stakeholders. Disseminating these developments and policy issues, and getting feedback from them is important. One such initiative taken up by CSIR-NISTADS is the NISTADS Outreach Programme (NOP) for effective communication. The focus of the programme is to engage S&T stakeholders and public at large. In the early stages of the programme Vitarka-Policy Debates were held, which included discussions on various relevant and current issues in the Indian context namely; large homogenous agriculture against small diversified agriculture, water sustainability in current agricultural trade policy, efficient use of water resources, questioning whether the R&D system is well designed for delivery and whether ground water should be considered only as a community wealth. Continuing with the aim of effective communication and discussions among CSIR Scientific Community, a workshop titled “Application of Information Sciences in Technology Development and Marketing” was held for discussions on the development of the CSIR Information Sciences group. The deliberations during the workshop, led to future directions for



paths to be followed for the communications related to S&T issues. Other initiatives such as short film making are also in the process for appropriate communication on various developments in science and technology. The aim is to keep communicating and sharing at regular intervals for a better understanding of the development in science and technology in various fields. The aim is to understand the current status of the dissemination and to further delineate as to how in the future public understanding of S&T issues would be promoted.

This programme is an ongoing programme and there are many activities that are still in process and are being planned for the future. There are many other activities that are in the pipeline, for instance the recommendation of the national workshop was to continue similar workshops for the various labs for interactions on development in S&T.

A PILOT STUDY FOR INCOME AND EMPLOYMENT GENERATION FOR SUSTAINABLE DEVELOPMENT OF NE REGION

Team: Dr.Mohd. Rais (PI)

MSME and Sustainable and Inclusive Development of the North East: An Evidence-Based Analysis

The Micro, Small and Medium Enterprises (MSMEs) hold the potential for sustainable socio-economic transformation of the North East, leading to its harmonious and economically sound integration with the rest of the country. However, realization of this potential requires much more active policy intervention, leveraging instruments like The Micro, Small and Medium

Enterprises Development Act, as well as technology infusion. The evidence-based analysis by CSIR-NISTADS identifies certain key challenges in developing MSMEs over the North East and suggests a number of interventions to realize the transformative potential of MSMEs in the region.

The growing concerns for food safety are initiating the governments to develop stricter regulations and actions for the food industry. Although food safety is an important concern, yet the public sector enterprises sometimes face difficulties in providing the final items at the quantity and quality levels as required in the market. There are various ways and means by which this concern of handling food safety and quality could be assessed. Here we consider the aspect of co-regulation in handling particularly the food quality from the farm to fork stage of the Perishable Food Supply Chain (PFSC) in India and China. The aspects considered in this paper are (i) the current status of the PFSC in the two countries, (ii) analysis of whether co-regulation has been incorporated into the policies of the respective countries, (iii) evaluation of the role of co-regulation in enhancing the PFSCs; (iv) analysis of limitations of the current policies and steps for implementation in the future. Here the concentration is mainly on the fruits and vegetables sector. The authors have been able to identify the varying policies of co-regulations in the two countries and concentrate on the overall obstacles that remain in implementing the policies in these developing countries and decipher how policies could be developed for the future.



SOCIETAL PROBLEMS IN INDIA-BUILDING R&D ECOSYSTEM BASED ON TECHNOLOGY LANDSCAPING

Team: Dr. Praveen Sharma (PI)

There have been many approaches based on S&T capabilities towards eliminating the people's (societal) problems. It would be important to identify the approaches and evaluate the applicability and feasibility of these strategies towards solving societal problems. A recognized and inclusive R&D ecosystem is a requisite for addressing several societal problems. The S&T Applications to People's Problems (STAPP) effort by CSIR-NISTADS has identified many such problems. It is emphasized that S&T can offer operational solutions, contributing towards a rapid and disruptive socio-economic transformation of the country. The objectives of the pilot study have been documentation of S&T solutions, in terms of their applicability in the existing socio-economic context, and analysis built on secondary data/web-based data, including deeper enquiry towards identification and prioritizing of the concerns. The project activity comprises building the S&T-based methodology related to societal problems of the country. The effort includes documentation of capabilities for the S&T solution approach towards eliminating these challenges.

DEVELOPMENT OF SMART IRRIGATION SYSTEM FOR WATER EFFICIENT AGRICULTURE

Team: Dr. L. Pulamte (PI) and Dr. Kasturi Mandal (Co-PI)

Essentially all Sustainable Development Initiative Goals require significant

technology intervention. Under NISTADS Technology Innovation Programme (NTIP), a functional prototype, Water-Efficient Automated Smart Irrigation System (WASIS) was planned to be developed. Different crops have different soil water requirements at different stages of their growth. Delay in irrigation creates moisture stress, leading to wilting. On the other hand, excess irrigation can lead to an infestation of crops with diseases. The conventional irrigation system often suffers from under- or over-irrigation. The main objective of WASIS was to develop an automated irrigation system that responds efficiently to crop water requirement and field conditions like soil moisture and rainfall. WASIS would be water-efficient, automated, smart, customizable, easy to operate and cost-effective. Different variants to suit different clients or purposes such as domestic, small farms, large farms and estates could be then commercially developed further from this prototype. The methodology includes the integration of the system's components such as soil moisture sensors, rain gauge, data acquisition remote communication system, server, irrigation system (sprinklers with motors and accessories), algorithm to control an irrigation system, power supply, etc.

SOCIO-ECONOMIC DATA FROM HOUSEHOLDS ON HEALTH, WATER AND ENERGY VARIABLES

Team: Dr Madhulika Bhati, Dr. Kasturi Mandal

A national survey has conducted in South, East, West and North Zone in the household nearby MSME industry in the areas of Water, Energy and Health.





ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH (AcSIR)





ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH (AcSIR)

Coordinator: Dr. Mohammad Rais

CSIR-NISTADS, as a part of the Academy of Scientific and Innovative Research (AcSIR), has introduced PhD programmes on Science, Technology and Innovation Studies (STIS). The purpose of the courses is to create a critical mass of scholars and practitioners with analytical competencies to lead and transform India's science, technology and innovation trajectories in economically productive, socially progressive and environmentally sustainable ways. In its academic and policy endeavours, CSIR-NISTADS operates as the interface between science and society. At present, there are 30 Ph.D. students at the institute pursuing their degrees through AcSIR. The teaching courses being offered at AcSIR-NISTADS include:

1. Quantitative Research Methodology
2. Introduction to Qualitative Research
3. Indian Economy & Policy
4. Innovation Systems & Development
5. Science and Technology Systems – India and the World
6. Science, Technology & Innovation Policy
7. Trade & Technology
8. Enterprise Development through Value Chains Analysis
9. Intellectual Property Rights in the Context of Research, Innovation & Development

10. Resource Planning & Policy
11. Principle of Economics
12. Science, Technology & Innovation Strategy
13. An Introduction to Probability and Statistics
14. Introduction to History of Science

Students are pursuing their PhDs Thesis in various areas of research like:

- Decision support system and big data analytics
- Water and sanitation for public health
- Role of bilateral institutions in developing knowledge, networks and research innovation ecosystem
- Food and Nutrition Policy and regulatory framework
- S&T Policy conversions and analysis of livestock, breeding, engineering and biodiversity in India
- Interoperability of e-health applications
- Natural resources management
- Intellectual Property Rights
- Knowledge-based collaboration between Govt. research institutions and private sector industry
- Policy studies in genetic engineering
- Policies for MSME in agro-based sector and rural development
- Vaccines and public health sciences
- Api-culture in the Northeast region





KNOWLEDGE PROFILE

- **PUBLICATIONS**
- **PRESENTATIONS IN CONFERENCES**
- **STAFF NEWS**





PUBLICATIONS

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1. S. Bhattacharya, Yogesh Suman and Tabassum Jamal (2017) '*Policy Perspective on Innovation and Sustainable Development: Vol. IV of India S&T Series*', CSIR-NISTADS; published by Syahi Publication House: New Delhi, ISBN: 978-1-64204-704-0.

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2. K.C. Garg and S. Kumar, (2017) 'Bibliometrics of Global Ebola Virus Disease research as seen through Science Citation Index Expanded during 1987–2015', *Travel Medicine and Infectious Disease*, 16, 64-65.
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INTERIM REPORT

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- Y. Madhavi (2017) 'Globalization and its Impact on National Vaccine Innovation System in India', in: "Globalisation and India's Innovation Systems: A 'Creative Destruction'?", Mahatma Gandhi University, Kottayam, Kerala, July 2017. ISBN-978-93-80419-35-0

RESEARCH REPORTS

1. Madhulika Bhati and Kasturi Mandal, 'SME Survey on Water, Health and Energy in Households', For North, East and West Zone and South zone.
2. Naresh Kumar, Madhulika Bhati and Avinash Kshitij (2017) 'Design of a Real-Time Pollution Management System for Delhi', a CSIR-NISTADS

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- M. Bhati, R. Ahmed and Radhika (2017) 'Landscape of Micro, Small and Medium Enterprises in India', Policy Perspective on Innovation and Sustainable Development, 4: 239-248. NISTADS NTPR Publications.



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- Sujit Bhattacharya, et.al. (2018) A proceeding report of '4th Indialics Conference on 'Innovation for Sustainable Development: Perspectives, Policies and Practices in South Asia' and Indialics Training Workshop on November 1 and 5, 2017.

REPORT OF WORKSHOP

- M. Rais, P. Goswami and A. Kaul (2017) Report of National Workshop on "Application of Information Sciences in Technology Development and Marketing", November 21-22, 2017, CSIR-NISTADS-NISCAIR, New Delhi.

BOOK REVIEW

- Y. Suman (2018). [Review of the book Knowledge Innovation Strategy: Why Cats Don't Take Part in Rat Race? by Parag Kulkarni] Journal of Scientometric Research, 7(1): 63-64.

EDITOR-IN-CHIEF

- **Dr. Sujit Bhattacharya** is Editor-in-Chief of *Journal of Scientometric Research* (*J. Scientometric Res.*), which is an internationally targeted official publication of Phcog.Net. It publishes

peer reviewed articles online in an open access format. The journal encourages both empirical and theoretical contributions that advance scientometric research and also reaches out to scholars of Science and Technology Studies (STS), sociology, economics and any other field, who use scientometric data as the 'object of investigation' or apply scientometric analysis in policy or innovation studies. The journal thus seeks to publish articles in all the different domains of scientometrics, including patent studies (techometrics) and web-based studies (webometrics). [ISSN: Print - 2321-6654, Online - 2320-0059].

Frequency: Rapid at a time publication
- Triennial (3 issues/year)

PUBLISHED IN MAGAZINE

- Y. Madhavi. (2018). "How many Vaccines does a Child Need?", November 2017, www.eklavya.in (This article was translated in Hindi from MFC Bulletin, July-Nov 2016, vol.371-372, pages 1-3, and republished in Eklavya store magazine, published by Eklavya publications).



PRESENTATIONS IN CONFERENCES

- Madhulika, Bhati, 'Water Management System Ancient v/s Modern: A Case Study', at International Conference on Sustainable Technologies for Intelligent Water Management, STIWM-IITR, February 16-19, 2018.
- M. Rais, and A. Kaul (2017) 'CSIR-NISTADS Outreach Programme: Communicating S&T Policy Issues', presented at the 17th Indian Science Communication Congress: December 21-22, 2017: (ISCC-2017). "Communicating India's Scientific Wisdom: Changing Paradigms", New Delhi, India.
- Y. Madhavi (2017) 'Public Health in Small Nations: The Capacity Building',

presented in the International Conference on "Science and the Small Nations. Bridging the Gaps: A science Diplomacy Initiative", by Zaheer Science Foundation & UNESCO, November 14-16, 2017, at IICC Auditorium, India Islamic Cultural Centre, Lodi Road, New Delhi.

OTHER INFORMATION

- Sandhya Wakdikar was Chairperson for one session at The Fourth IndiaLICS International Conference 2017, New Delhi from November 2-4, 2017. She was also a discussant for one session at the conference.



STAFF NEWS

Foreign Visits during this period:

S.No.	Name and Designation	Place visited and purpose of visit	Duration of visit
1.	Dr. Vipin Kumar Principal Scientist	Bonn, Germany To participate in MGG alumni conference 2017 at Bonn, Germany	November 19-23, 2017



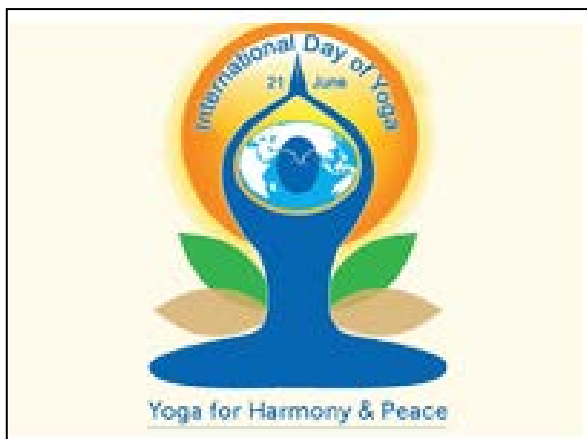


-
- **WORKSHOPS, CONFERENCES
AND OTHER EVENTS**
 - **LECTURES ORGANISED**



WORKSHOPS, CONFERENCES AND OTHER EVENTS ORGANISED

CELEBRATION OF INTERNATIONAL DAY OF YOGA



3rd International Day of Yoga 2017 was celebrated at CSIR-NISTADS with great enthusiasm. About 40 staff members participated and practised yoga during the event that was formally inaugurated by Dr. Prashant Goswami, Director CSIR-NISTADS. While delivering the inaugural address, Dr. Goswami demonstrated few *yogāsanas* and emphasised on the positive and energetic role the Yoga can play in our day-to-day life.

Dr. P. Goswami(right), Director CSIR-NISTADS, and Kashmiri Lal, during inauguration of International Day of Yoga 2017.



CSIR-NISTADS Staff members are doing Yoga Practice during International Day of Yoga 2017.



Following Yogāsanas and Prāṇāyāma were practised.

Sadilaja /Cā lana Kriyas/Loosening Practices

Feet rotation, Ankles movement, Knees rotation, Solders rotation, and Neck Bending.

Yogāsanas

Vṛkṣāsana, Pāda-Hastāsana, Ardha Cakrāsana, Trikoṇāsana, Vajrāsana/Vīrāsana, Ardha Uṣṭrāsana, Uṣṭrāsana, Śaśakāsana, Uttāna Maṇḍūkāsana, Vakrāsana, Bhujāṅgāsana,

Setubandhāsana, Pavanamuktāsana, Śavāsana, Singhasana, and Hansi.

Prāṇāyāma

Naḍīśodhana / Anuloma Viloma Prāṇāyāma, Śītalī Prāṇāyāma Bhrāmarī Prāṇāyāma

Dhyāna

Saṅkalpa,

Śāntiḥ Pāṭha

CSIR PLATINUM JUBILEE FOUNDATION DAY CELEBRATION

The CSIR Platinum Jubilee Foundation Day was celebrated on September 26, 2017 in CSIR-NISTADS. Prof. Ashoka Chandra, former Secretary, MHRD, Govt. of India; and Chairman RC, CSIR-NISTADS was the Chief Guest. Children of CSIR-

NISTADS staff participated in various activities like, drawing and essay competitions, fancy dress competition, etc. held at the institute. Cultural and stage activities were also organized for the staff and their children to mark the occasion.



Staff Children during essay and drawing competition



Dr. Tabassum Jamal welcoming Prof. Ashok Chandra by presenting a bouquet.



Dr. Yogesh Suman playing tabla

A group song by CSIR-NISTADS staff

WORKSHOPS/ROUNDTABLE MEETING

1. 2nd NISTADS-STEPI Joint Workshop on ‘STI and the Challenges for the Future: Sharing Experiences’, at CSIR-NISTADS on April 7, 2017.

As the national representative think tanks for the science and technology in India and Korea, CSIR-NISTADS and STEPI assembled for exchanging their accumulated experience and expertise to promote science for the future world which is confronted with new issues and challenges in terms of S&T policy making in the 2nd NISTADS-STEPI Joint Workshop on “STI and the challenges for the Future: Sharing Experiences” on 07th April, 2017 at Venue: CSIR-NISTADS Conference Hall, New Delhi . The workshop focused on the theme of “STI and the challenges for the Future: Sharing Experiences”. The workshop discussed three topics; i) STI Policies in India and Korea, ii) Open and Inclusive Science & Innovation, and iii) Technological Foresight and the Future of India and Korea. It focussed on the achievement of NISTADS and STEPI as a national research institute for STI policy. It also discussed the STI policies of India and Korea and the need for future studies on the S&T policy that could give an insight for preparing the rapid industrial development which brought by the scientific advance.

2. International Workshop on ‘Science, Technology, Innovation and Management for Water Sustainability’, April 19-20, 2017, CSIR-NISTADS.

CSIR-NISTADS and the Asia and Pacific Centre for Transfer of Technology (APCTT) of the United Nation Economic and Social Commission for Asia and the Pacific (UNESCAP) co-organised the Workshop. The Event was jointly supported by the Department of Science and Technology, Govt. of India and APCTT-ESCAP. Representatives and experts from seven countries from the Asia-Pacific, particularly from the South Asia region (namely Bangladesh, Bhutan, India, Nepal, Singapore, Sri Lanka, and Thailand, several CSIR Laboratories were involved in the development and advancement of water treatment technologies; academicians and business entities participated in the workshop.



Academician, Scientists, Researchers and Business entities participated in the workshop

3. A delegation visited from Nepal Academy of Science and Technology (NAST) led by its Vice-Chancellor Prof. Jiba Raj Pokharel, together with Dr. Sunil Babu Shrestha, Member, Nepal Planning Commission, for a scientific exploratory visit on July 4, 2017 .



4. Expert Meeting workshop on “Technology Enablement of North East (TENE)” under an MoU with AICTE on October 4-5, 2017



5. The first National Workshop on ‘Techno-Foresight and Industrial Investment Planning (TRIP)’, held at NISTADS on October 11, 2017. Dr. Girish Sahni, DG CSIR, Chaired the Inaugural Session, with Dr. V.K. Saraswat Member NITI Ayog as the Chief Guest.



6. **International Training Workshop on “Innovation for Sustainable Development: Perspectives, Policies and Practices in South Asia”, November 1 and 5, 2017, organised by Centre for Studies in Science Policy, JNU and CSIR-NISTADS, held on November 1 at CSIR-NISTADS and on November 5 at Jawaharlal Nehru University, New Delhi.**

7. **Project Development Workshop on ‘Technology Empowerment of North-East: Water, Energy and Communication Solutions (TENE-WECS)’ on November 2-5, 2017 at CSIR-NIEST**



8. **Proposal Development Workshop on Technology enablement in Water, energy and communication sector (AICTE sponsored Project), 2017 in North Eastern Hill University, Shillong, December 21-22, 2017**



9. National Workshop on “Application of Information Sciences in Technology Development and Marketing”, November 21-22, 2017, New Delhi, Organizer: CSIR-NISTADS and Co-organizer: CSIR-NISCAIR, Venue: CSIR-NISTADS Conference Hall



With the onset of the Fourth Industrial Revolution, Information Sciences are poised to play ever increasing roles in the entire cycle of technology development and commercialization. This surge in Information Sciences provides both an opportunity and a challenge for CSIR. The Workshop on “**Application of Information Sciences in Technology Development and Marketing**” was held to map the strengths and the gaps in Information Sciences at CSIR to create a comprehensive Information Sciences Ecosystem at CSIR. The participants included Directors/Heads of the five Information Sciences laboratories/Units and representatives from CSIR Headquarter.

Director, NISTADS highlighted role the Information Sciences can play in the entire cycle of technology development: from product planning to market entry; he proposed a 2-pronged approach: one focused on enabling CSIR through Information Sciences and the other involving core Information Sciences issues like data optimality, social dynamics, and decision support system. He emphasized the need to develop an Action Plan for applications of Information Sciences at CSIR. Dr. Manoj K. Patariya, Director, CSIR-NISCAIR, emphasized the importance of proper communication strategies for science dissemination as well as technology commercialization. Dr. V.Y. Mudkavi from CSIR 4PI, highlighted the advent of the fourth paradigm, and the need for the development of critical human



resource base in data analytics. The ongoing patent informatics (URDIP) and the status of the Traditional Knowledge Data base (TKDL) were also highlighted.

During the sessions, 45 participants from many CSIR laboratories highlighted strengths and challenges in applications of Information Sciences at CSIR, and identified priority areas. The thematic sessions were followed by a plenary session involving all the participants. It was decided that a collective roadmap for applications of Information Sciences at CSIR should be pursued.

10. National Workshop on ‘Mind, Consciousness and Beyond: Building on Vedantic Metaphysics’, held at CSIR-NISTADS, March 6, 2018.

The National Workshop on Mind, Consciousness and Beyond: Building on Vedantic Metaphysics was organized at CSIR-NISTADS on March 06, 2018 to explore the new knowledge pathways; to understand the link between traditional knowledge and metaphysics such as Ayurveda, Logic and vedantic metaphysics. The workshop aimed to enhance our understanding of the mind, consciousness and knowledge in the backdrop of the current scientific knowledge and major challenges and methodologies. The workshop was organised in collaboration with National Institute of Advanced Studies, Bangalore (NIAS). The participants included scientists, vedic scholars and thought leaders from a number of organizations across the country. DG, CSIR Dr. Girish Sahni graced the occasion as the Chairman of the Inauguration Session and Prof Vijay Bhatkar, Chancellor, Nalanda University was the

Guest of Honour. Dr. Girish Sahni in his address described the discovery of the mind is the greatest discovery and suggested that there was a pathway between the mind and some dimension which we must explore. Prof Bhatkar in his address pointed out the relevance of Vedic Science in 21st Century and stressed that the interface between Modern Science and Vedic Science. The workshop concluded with major recommendations for follow up action that could be undertaken.

11. Roundtable meeting on ‘Development of Medical Tourism Ecosystem and Networks in India: Meeting the Challenges of a Sustainable Growth-Oriented Medical Tourism Industry’, held at CSIR-NISTADS, March 15, 2018.

CSIR-NISTADS in collaboration with NIAS, Bangalore organised a Roundtable meeting on “Medical Tourism” involving senior officials from major healthcare facilities on 15th March 2018 at NISTADS with the goal of an intense dialogue and dialect to enhance and sustain Medical Tourism multifold in India. The event included the senior health professionals from Association of Healthcare Professionals of India (APHI), and senior representatives from major hospital such that Narayana health, Bangalore, Aster Medcity, kerela, KIMS Hospital, SOUKYA International Holistic Centre, Bengaluru. The meeting was conducted in five sessions to develop specific recommendation that could be put forwarded as policy suggestions to the respective department of Government of India to enhance and sustain Medical Tourism multi-fold in India. The meeting brought together



leading experts and practitioners to share experience and examine issues like:

- Scope of the Medical Tourism & Present Status
- Characterization of a Complete MT Ecosystem (Point-to-Point Care)
- Authenticity and transparency in health care service delivery and marketing
- Assessment of global metrics on MT with reference to India



LECTURES ORGANISED

- **Identifying Key Barriers for Apiculture Adoption in India** - Naresh Babu, PhD Scholar, AcSIR-NISTADS, January 29, 2018

Apiculture, the scientific domestication of honeybees has the potential to help the farmers to improve their farm productivity. Honeybees act as principal pollinators of crops and wild-growing plants making them indispensable for agriculture, ensuring plant reproduction and an exceptionally important component in maintaining healthy ecosystems. Almost one third of the global food of plant origin production is possible due to the pollination service rendered by these insects.. Apart from pollination services, beekeeping constitutes a resource of sustainable income generation to the rural and tribal farmers. It provides them with valuable nutrition in the form of honey, protein rich pollen and brood. Apart from honey, modern beekeeping also includes production of bees wax, bee-collected pollen, bee venom, royal jelly, propolis, and also selling off excess bees, queen bees and nucleus colonies to other bee keepers. However, in spite of all these advantages, apiculture has not received its due focus in India.

- **A dynamical model of opinion formation** - By Dr. Shivnarayan Nishad and Dr. Prashant Goswami, February 20, 2018

Many social processes, from election to terrorism, depend on the growth of memberships to opinions. In a generic sense, an opinion is a proposition that for an individual has financial, cultural and

emotional implications. The individual responses in turn create a 'social response' which influences the individual response resulting in a dynamical system with two-way feedbacks. The study considers a set of deterministic dynamical equations that describe individual responses to a class of prescribed opinions. The time-dependent opinion dynamics model exhibits nearly complete acceptance to nearly complete rejection with complex evolution, providing a framework for a mechanistic description of opinion formation.

- **Perspectives of clinicians and medical students about use of telemedicine in India** – By Raj Kishor Kustwar, PhD Scholar AcSIR-NISTADS, February 26, 2018

Adequate health care for the country's remote and rural people has been a great challenge during past decades. There are only 0.6 doctors per 1000 population in India which is far below the WHO recommendation of 2.3 doctors per 1000 population. Only 2% of the qualified doctors are available in remote and rural areas. Besides, patients from rural have to travel about 40 km for district hospital and 70 km to seek specialty treatment. Thus, there is a dire need for intervention of telemedicine. Various telemedicine projects have been launched by central and state governments time to time. But previous studies suggests that telemedicine faced many challenge like lack of infrastructure, lack of funding, and most importantly lack of awareness and reluctance of patients and doctors to use telemedicine. So, a preliminary study was conducted to know



the perspective of doctors and medical students about telemedicine. A pre-structured questionnaire was designed using google docs and sent to over 1000 clinicians and medical students via email, Facebook or WhatsApp. Sixty two responses were received from online survey from July, 2017 to January, 2018. Respondents asserted that telemedicine technology has a huge impact on reducing inequality in health-care distribution, can provide affordable and quality healthcare, reduced costs by reducing readmissions and unnecessary emergency department visits for rural and remote patients. Vis-a-vis telemedicine is facing many challenges like poor diagnosis, inactive participation of doctors due to lack of time, awareness and legal and ethical issues. Skills to use telemedicine can be imparted to ASHAs, medical lab technicians, Pharmacists or peoples who desire to work on telemedicine kiosks, which will take off burden of doctors. Moreover telemedicine oriented policies should be framed with special emphasis on reducing legal issues for doctors, payments of extra emoluments for doctors to use telemedicine and public awareness programs to promote use of telemedicine. More research is required with involvement of all the stakeholders in future.

- **Barriers and Enablers for Sustainable Development in North-East India - By Dr. Mohammad Rais and Arshia Kaul, March 13, 2018.**

The overall sustainable development encompasses within it the economic, social and environmental issues. Given that over the years this concept has become important to consider, it is also essential to understand how to assess sustainable

development. For instance, when we want to analyse whether a particular region is moving towards sustainable development, then the question that lies in front of us is, what are the measures by which the assessment can be done? This study considers the case of the assessment of sustainable development of the North East region of India. In this region, we particularly focus on how the development of households, the food-processing industry and the MSE sector ensure the overall development of the North East. We consider the assessment based on (i) the economic indicators through studying the MSEs in general and food-processing units; (ii) the social indicators through analyzing the households and overall skill development; and (iii) environmental issues in the region. Based on primary and secondary data, we are able to establish the indicators of the current status of development in the North East region.

- **Identification of barriers in R&D of Neglected tropical diseases by taking the case of Chikungunya in India - By Dhruv Mishra, PhD Scholar AcSIR-NISTADS, March 26, 2018**

Neglected tropical diseases (NTDs): a diverse group of communicable diseases that prevail in tropical and subtropical conditions in 149 countries – affect more than one billion people and cost the developing economies billions of dollars every year. India, along with other countries of South Asia, bears the highest burden of Neglected Tropical Diseases. The reasons for private firms not investing in R&D of NTDs are numerous and include: (a) High capital costs to undertake the R&D and the long time between R&D investment and “commercialisation” of the



resulting technology. (b) R&D investment not appropriable (in this case, insufficient commercial returns. (c) High technical risk associated with the underlying R&D. (d) Development and/or success /uptake of the technology depends on actors from different sectors. This study aims to identify barriers in R&D of NTDs in various sectors (Public, private and PPP) by taking the case of Chikungunya in India. This study also aims to assess the role of

current IPR policy in pharmaceutical industry specifically focussing on NTDs.

BOOK RELEASE FUNCTION

Book Launch & Announcing NISTADS Track in Policy Research (NTPR) of **“Policy Perspective on Innovation and Sustainable Development”**, Vol. IV in India S&T Series, on February 20, 2018.



Knowledge Management

- **PROJECT MONITORING & EVALUATION (PME)**
- **LIBRARY**
- **IT INFRASTRUCTURE**
- **MANAGEMENT COUNCIL**
- **RIGHT TO INFORMATION ACT (RTI)**
- **BUDGET**
- **हिंदी की गतिविधियां**
- **STAFF LIST**





PROJECT MONITORING & EVALUATION (PME)

NISTADS has a PME Division with the following activities:

- Monitoring and Evaluation of Grant-in-aid projects
- Monitoring and Evaluation of CSIR projects i.e. MLP, OLP, etc.
- Organizing Training programs of Students from BITS, IIT and other reputed institutions
- Arranging training programs for faculty.
- To act as Nodal point between the Institute and CSIR Head Quarter for the timely delivery of the queries related to projects, Parliament questions and any other issues pertaining to R&D activity of CSIR-NISTADS
- Preparation and timely maintenance of databases for all intramural and extramural research projects.
- Dissemination of information on all relevant National & International Research Program Requests including fellowships and maintenance of NISTADS' required registration with such agencies as mandatory, and liaison with grant-giving agencies.
- Guiding fresh scientific personnel in the preparation and submission of project proposals.
- Preparation of RC Agenda, convening RC meetings and keeping the record and database of all the RC activities. Participation in institute's annual plan and budget preparations, as well as annual reporting, are mandatory activities of the Division.



LIBRARY

CSIR-NISTADS library is playing central and impartial role to meet the requirement of scientific, technical and other staff according to changes in research the environment. Library is well equipped with organisational expertise and well placed advisory committee.

CSIR-NISTADS library added 479 books to its collection on various aspects of Science Technology and Society during 2017-18. After this additions library has a total 27060 books in its collection. KOHA software is being used for computerised circulation and cataloguing. Library also subscribed 43 science journals and popular

magazines and two newspapers in Hindi language. (हिंदुस्तान एवम नवभारत टाइम्स).

During the year about 200 books were lend out to users in the institute and about 50 books were send on inter-library loan to various libraries. Library continued to support the Science Technology and Society research activities of the Institute according to the needs of the users.



IT INFRASTRUCTURE

CSIR-NISTADS has self-designed and hosted bilingual website which is running on Linux Server, an open source software (OSS) and is on Joomla platform. Joomla is content management system (CMS) and open source software that supports pictures, texts and videos. Our website is being regularly updated. We have our own Linux based DNS Server hosted in the institute. Our institute has email for all staff members from NIC with nistads.res.in domain name.

We have HP 40 Gbps Core Switch and Edge switches for our network infrastructure. The network backbone is on optical fiber & end to end connectivity is 10 Gbps. The optical fiber network is from Server Room to Umbrella, Administrative Block, Second Floor and Library. This Institute has controller based Wi-Fi internet connectivity in the campus through secured login. We also have 30 KVA Three Phase online UPS in Server Room which provides uninterrupted power supply to IT equipment round the clock.

CSIR-NISTADS has One Gbps leased line from National Knowledge Network (NKN). The NKN is a state-of-the-art multi-gigabit pan-India network for providing a unified high speed network

backbone for all knowledge related institutions in the country.

CSIR-NISTADS has Sophos Cyberoam, Unified Threat Management (UTM) Appliance. We are having about 150 desktops, 40 laptops as well as few workstations having secured internet access. The systems and servers are protected with Trend Micro Worry Free Business Security which is client based antivirus that prevents the system from being attacked by unauthorized entities and helps them running smooth and safe.

CSIR-NISTADS has excellent video conferencing and audio visual facility with the latest equipments. We also have state of Art Conference Hall. CCTV and Biometric Attendance System have been installed in the Institute. The Institute has Video Wall at the Reception.

This institute has Intel Xeon 12 core processor based Servers. These Servers are used for variety of services like Website, FTP, DNS, Antivirus and application Servers. These servers are running on Windows and Linux operating system to meet the requirements of our organization. We are using various application software to meet the requirements of our research and analysis.



MANAGEMENT COUNCIL

January 1, 2016 to December 31, 2017

CHAIRMAN

Dr. P. Goswami
Director, CSIR-NISTADS

MEMBERS

Dr. G.D. Sandhya
Chief Scientist

Dr. Naresh Kumar
Sr. Principal Scientist

Dr. Kasturi Mandal
Scientist

Dr. Suman Ray
Scientist

Shri Anil Kumar Sharma
Sr. Technical Officer

Director
CSIR-NISCAIR, New Delhi

Dr. R.R. Hirwani,
Head, URDIP, Pune

Dr. Vipin Kumar
Principal Scientist & Head, PME

COFA/FAO
CSIR-NISTADS

MEMBER-SECRETARY
COA/AO
CSIR-NISTADS

MANAGEMENT COUNCIL

January 1, 2018 to December 31, 2019

CHAIRMAN

Dr. P. Goswami
Director, CSIR-NISTADS

MEMBERS

Dr. Mohd. Rais
Sr. Principal Scientist

Dr. Y. Madhavi
Sr. Principal Scientist

Sandhya Wakdikar
Principal Scientist

Avinash Kshitij
Scientist

Shri Anil Kumar Sharma
Sr. Technical Officer (3)

Dr. Anurag Agrawal
Director, CSIR-IGIB, New Delhi

Dr. Tabassum Jamal,
Chief Scientist and Business Development
Officer

CoFA/F&AO
CSIR-NISTADS

MEMBER-SECRETARY
COA/AO
CSIR-NISTADS



RIGHT TO INFORMATION ACT (RTI)

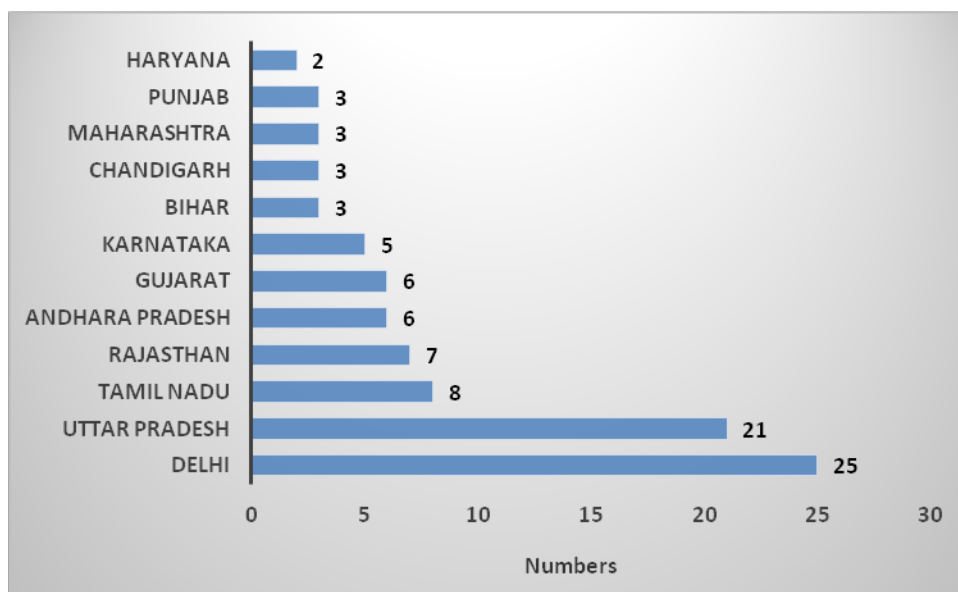
CSIR-NISTADS has implemented The Right to Information Act, 2005 as public authority under Department of Scientific and Industrial Research (Ministry of Science and Technology). For the year April 1, 2017 to March 31, 2018, CSIR-NISTADS has received 100 RTI, 13 First

Appeals and one Second Appeal. (Refer to Table-1). **Broad Topics:** Recruitments, Assessment & Promotions, Pay, Pensions, Leaves, Fellowships, Office Rules, PWD, and Others. RTI received according to States/UTs are shown in Figure-1.

Table 1: RTI applications, First Appeals and Second Appeals received during this period.

RTI Applications received	First Appeals	Second Appeals
100	13	01

Figure 1: RTI received according to States/UTs during this period





Names, Designations and other particulars of the RTI Officials:

Appellate Authority:

Dr. M. Rais
Senior Principal Scientist
Ph. (Off): 011-2584 3052
Email: rais@nistads.res.in

Nodal Officer:

Mr. Brij Bihari
Section Officer
Ph. (Off): 011-2584 3072
Email: brijbihari@nistads.res.in

Central Public Information Officer:

Mr Kashmiri Lal
Senior Technical Officer (3)
Ph. (Off): 011-2584 3094
Email: kashmirilal@nistads.res.in

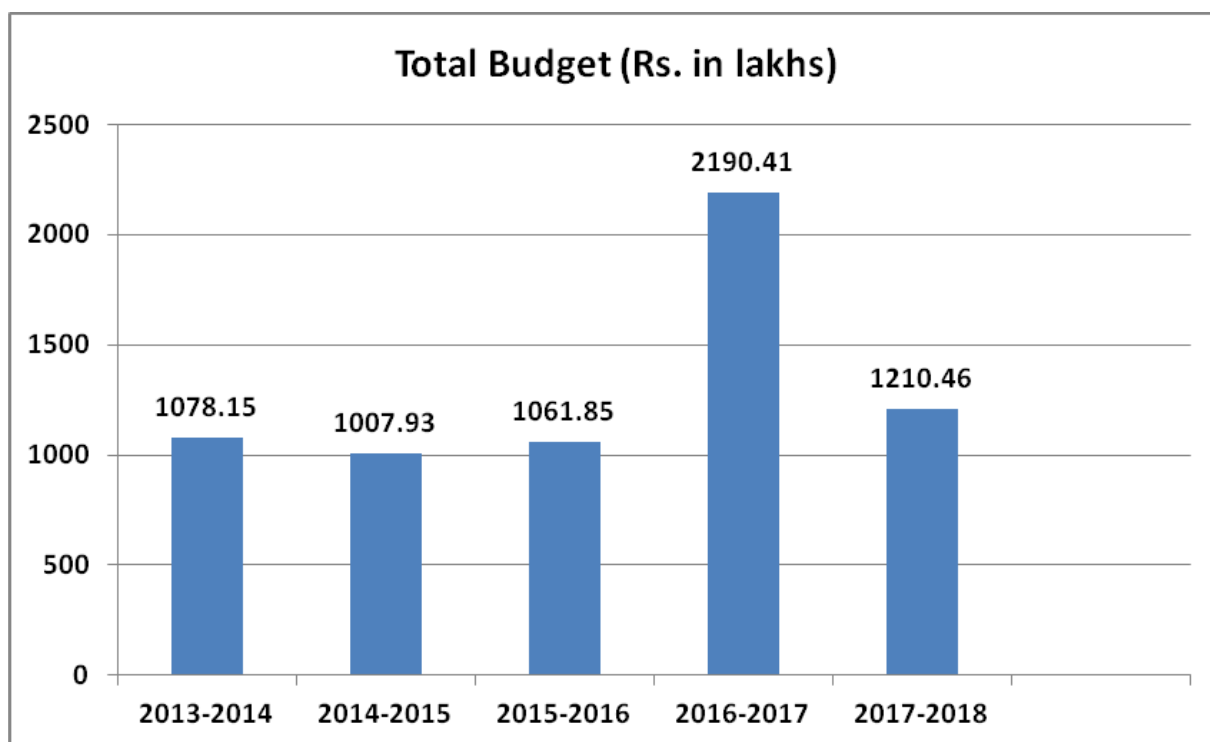
Assistant Public Information Officer

Dr. Anil Kumar
Sr. Technical Officer (1)
Ph. 011-2584 3097
Email- ak.kushwaha@nistads.res.in



BUDGET FOR LAST FIVE YEARS

Year	Total Budget (Rs. in lakhs)
2013-2014	1078.15
2014-2015	1007.93
2015-2016	1061.85
2016-2017	2190.41
2017-2018	1210.46







हिंदी की गतिविधियां



हिंदी की गतिविधियां

सीएसआईआर-निस्टैड्स में दिनांक 1-4-2017 से 31-3-2018 तक की अवधि में की गई हिंदी संबंधी गतिविधियां:

सीएसआईआर-राष्ट्रीय विज्ञान, प्रौद्योगिकी और विकास अध्ययन संस्थान, नई दिल्ली में राजभाषा अधिनियम (3)3 की धारा 1963 तथा राजभाषा नियम 1976के अनुपालन में दिनांक 1/4/2017 से 31/3/2018 की अवधि में विभिन्न अनुभागों द्वारा हिंदी-अंग्रेजी में जारी किए गए अनेक कार्यालय ज्ञापनों, परिपत्रों, प्रैस विज्ञप्तियों, निविदा सूचनाओं तथा अन्य कार्यालयों को हिंदी में भेजे गए पत्रों/ईमेल एवं फाइलों में लिखी गई टिप्पणियों, लिखे गए चेकों और अनुभागीय रजिस्ट्रों में की गई प्रविष्टियों आदि के अतिरिक्त, राजभाषा कार्यान्वयन से संबंधित अन्य गतिविधियां निम्न प्रकार हैं:-

1. सीएसआईआर-निस्टैड्स की “राजभाषा कार्यान्वयन समिति” की त्रैमासिक बैठकों का आयोजन: i) दिनांक 29/5/2017; ii) दिनांक 28/8/2017; iii) दिनांक 6/12/2017; और iv) दिनांक 6/4/2018
2. वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद, मुख्यालय, नई दिल्ली और उत्तरी क्षेत्रीय कार्यान्वयन कार्यालय-1 (दिल्ली), राजभाषा विभाग, नई दिल्ली को निम्नलिखित तिमाही हिंदी प्रगति रिपोर्ट भेजी गई: i) 1 अप्रैल - 30 जून, 2017 (दिनांक 15/7/2017); ii) 1 जुलाई-30 सितंबर, 2017 (दिनांक 6/11/2017); iii) 1 अक्टू.- 31 दिसं., 2017 (दि.17/1/2018); एवं iv) 01 जनवरी-31 मार्च, 2018 (दिनांक 13/4/2018)
3. सीएसआईआर-निस्टैड्स के अधिकारियों एवं कर्मचारियों के लिए निम्नलिखित हिंदी कार्यशालाओं का आयोजन किया:

i) 23 जून, 2017 को “निस्टैड्स में सूचना प्रौद्योगिकी की आधारिक संरचना (आईटी इन्फ्रास्ट्रक्चर) तथा कंप्यूटर पर हिंदी का प्रयोग” प्रशिक्षण का आयोजन किया गया। श्री अरविंद कुमार भारद्वाज, वरिष्ठ तकनीकी अधिकारी (3) ने सीएसआईआर-निस्टैड्स में उपलब्ध आईटी इन्फ्रास्ट्रक्चर के बारे में प्रतिभागियों को हिंदी में विस्तृत जानकारी दी तथा कंप्यूटर पर हिंदी में (यूनिकोड में) कार्य करने और ई-मेल आदि भेजने का अभ्यास भी कराया। इस प्रशिक्षण में सीएसआईआर-निस्टैड्स के वैज्ञानिकों/तकनीकी कर्मिकों तथा प्रशासन/वित्त एवं लेखा/भंडार एवं क्रय अनुभागों और पुस्तकालय सहित कुल 40 प्रतिभागियों ने हिस्सा लिया।

ii) 28 दिसंबर, 2017 को आयोजित हिंदी कार्यशाला में “दूरस्थ शिक्षा में डिजिटल पुस्तकालय का महत्व” पर डॉ. (सुश्री) अनिता बाली, वरिष्ठ तकनीशियन (2), सीएसआईआर-निस्टैड्स और “सूचना का अधिकार अधिनियम, 2005” पर श्री कश्मीरी लाल, वरिष्ठ तकनीकी अधिकारी (3), सीएसआईआर-निस्टैड्स ने हिंदी में



नराकास (उ. दि.), कृषि वैज्ञानिक चयन मंडल, पूसा, नई दिल्ली द्वारा आयोजित अंतिम चरण की ‘प्रश्नोत्तरी प्रतियोगिता’ में प्रथम स्थान प्राप्त करने वाले निस्टैड्स के तीन सदस्यीय दल को प्रमाण पत्र प्रदान करते हुए डॉ. पी. गोस्वामी, निदेशक

विस्तारपूर्वक चर्चा की। इस कार्यशाला में सीएसआईआर-निस्टैड्स के कुल 40 प्रतिभागियों ने हिस्सा लिया। इस अवसर पर सीएसआईआर-निस्टैड्स के निदेशक डॉ. पी. गोस्वामी जी ने *नगर राजभाषा कार्यान्वयन समिति (उत्तरी दिल्ली)*, कृषि वैज्ञानिक चयन मंडल, कृषि अनुसंधान भवन-1, पूसा, नई दिल्ली द्वारा 23 नवंबर, 2017 को आयोजित की गई **अंतिम चरण की प्रश्नोत्तरी प्रतियोगिता में प्रथम स्थान** प्राप्त करने वाले निस्टैड्स के तीन सदस्यीय दल (डॉ. नरेश कुमार, वरि. प्रधान वैज्ञानिक, श्री अंकुर जैन, अनुभाग अधिकारी (वित्त एवं लेखा) एवं श्री प्रीतेश कुमार, सहायक (सा.), ग्रेड-1) को प्रमाणपत्र प्रदान किए।

4. सीएसआईआर-निस्टैड्स की 1 अप्रैल-30 सितंबर, 2017 तथा 1 अक्टूबर 2017 से 31 मार्च 2018 को समाप्त अवधि की "छमाही हिंदी प्रगति रिपोर्ट" *सदस्य सचिव, नगर राजभाषा कार्यान्वयन समिति (उत्तरी दिल्ली)*, कृषि वैज्ञानिक चयन मंडल, कृषि अनुसंधान भवन-1, पूसा, नई दिल्ली-110012 को अवलोकन एवं आवश्यक कार्रवाई के लिए भेजी गई।
5. 'हिंदी दिवस' (14 सितंबर) के उपलक्ष्य में सीएसआईआर-निस्टैड्स में दिनांक 31-8-2017 से 14-9-2017 तक 'हिंदी पखवाड़ा' मनाया गया। इस अवधि में संस्थान के

अधिकारियों एवं कर्मचारियों के लिए अनेक हिंदी प्रतियोगिताओं का आयोजन किया गया दिनांक 14-09-2016 को अपराह्न 2:30 बजे "निस्टैड्स सम्मेलन कक्ष" में 'हिंदी पखवाड़ा समापन समारोह' का आयोजन किया गया। इस अवसर पर मुख्य अतिथि के रूप में हिंदी के प्रसिद्ध विद्वान पूर्व निदेशक (भाषा), केंद्रीय हिंदी निदेशालय, नई दिल्ली एवं सैक्रेटरी जनरल वर्ल्ड एसोसिएशन ऑफ वैल्यू एजुकेशन प्रो. सोमदत्त दीक्षित जी को आमंत्रित किया गया।



हिंदी पखवाड़ा समापन समारोह, दिनांक 14-9-2017 के अवसर पर (मंच पर बाएं से दाएं) प्रो. सोमदत्त दीक्षित, पूर्व निदेशक, हिंदी निदेशालय (मुख्य अतिथि), डॉ. पी. गोस्वामी, निदेशक, निस्टैड्स एवं डॉ. जी. डी. संध्या, प्रमुख वैज्ञानिक

नोट: अधिक जानकारी के लिए कृपया निस्टैड्स वेबसाइट www.nistads.res.in पर उपलब्ध हिंदी गतिविधियां देखें।



STAFF LIST





STAFF LIST

Director

Dr. P. Goswami

Chief Scientist

Dr. (Ms.) G.D. Sandhya
Dr. (Ms.) Tabassum Jamal
Dr. Sujit Bhattacharya

Senior Principal Scientist

Dr. Mohammed Rais
Dr. (Ms.) Y. Madhavi
Dr. Naresh Kumar
Dr. Vipin Kumar
Dr. L. Pulamte

Principal Scientist

Dr Yogesh Suman
Mrs. Sandhya Wakdikar

Scientist

Dr. (Ms.) Madhulika Bhati
Shri Avinash Prasad Kshitij
Dr. (Ms.) Kasturi Mandal
Dr. (Ms.) Suman Ray
Dr. Shivnarayan Nishad (joined on
December 5, 2017)

Sr. Technical Officer (3)

Shri Anil Kr. Sharma
Shri A.K. Bhardwaj
Dr. Suresh Kumar
Shri Kashmiri Lal
Dr. (Ms.) Praveen Sharma

Sr. Technical Officer (2)

Ms. Renu Jethi

Sr. Technical Officer (1)

Dr. Anil Kumar

Technical Assistant

Shri Chand Mohammad (joined on
December 12, 2017)

Sr. Technician (2),

Dr. (Ms.) Anita Bali
Ms. Tara Verma
Shri N.K. Prashar
Shri J.S. Narula
Shri R.K. Nagarwal

Lab. Assistant

Shri Madan Kumar
Shri Dheeraj Pal
Shri Ram Suphal
Shri K.C. Joshi

Lab. Attendant

Shri Shiv Singh Negi
Shri Murli Dhar

Controller Of Administration

Shri Surender Kumar (joined on March 2,
2018)

Administrative Officer

Ms. Mercy Joseph (retired on October 31,
2017)
Shri Sunil Kumar (joined on November 13,
2017)

Finance & Accounts Officer

Shri Jai Prakash Indora

S&PO

Shri Laljasei Misao

Section Officer (Gen.)

Shri Brij Bihari
Shri A.K. Handa (retired on September 30,
2017)



Section Officer (F&A)

Shri Ankur Jain

Section Officer (S&P)

Ms. Anita Joiya (joined on August 21, 2017)

Hindi Officer

Shri Virpal Singh

Private Secretary

Shri Harpal Singh

Shri Mohan Lal

Shri Ved Prakash

Assistant (Gen) Grade-I

Shri Anil Kumar

Shri Manish Kumar Mehta

Shri N.A. Khan

Shri Pretesh Kumar

Shri Mohd. Idrees

Shri Surinder Pal

Assistant (F&A) Grade-I

Shri Anisur Rehman

Assistant (S &P) Grade-I

Ms. Indira Jain

Shri Rakesh Kumar Mago

Shri Kanchan Singh Negi

Assistant (F&A) Grade-II

Shri M.S. Rawat

Shri Narender Singh

Senior Stenographer

Shri Pukhraj (Hindi)

Shri Ashok Kumar (retired on September 30, 2017)

Ms. Sunita Arora

Ms. Inderjeet Kaur

Ms. Dolly Chaudhary

Staff Car Driver

Shri Surinder Prasad

Record Keeper

Shri Harbans Singh

Daftry

Shri Rajnath

Peon

Shri M. Kamrul

Multi Tasking staff

Shri Mohit

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