



ANNUAL REPORT 2019-2020

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TAMILNADU SCIENTIFIC RESEARCH ORGANISATION

Plot No.39, Mura Bhavan, Koodal Nagar, Rajagopalapuram Post, Pudukkottai 622003, TamilNadu, India.

www.tnsroindia.org.in





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Forward



We have great pleasure in presenting you 2019-2020 annual report of **TamilNadu Scientific Research Organisation** (TNSRO).TNSRO is a registered institution, which is duly registered by the govt. of Tamilnadu under Indian Trust Act. TNSRO was started on 1997 by a group of social and scientific volunteers for the welfare of down trodden people. An institution has carried outstanding multi disciplinary activities in the field of science and society development. TNSRO has got registration from Income Tax department for 12A and 80G

exemption under act 1961. TNSRO is a catalog organization working for the development of lower strata through the scientific application. Our organization to promote the advancement, transfer and sharing of scientific knowledge, science education, raise public awareness of sustainable development issues by launching co-operative activities with major groups. The institution is working for the application of science and technology in rural villages in Pudukkottai dist. Our main aim is to conserve our nature and propagate the simple scientific techniques for rural prosperity among the rural and scientific community since 1997.

In this mentioning period we could able to reach the unmet, unloved, uncared and unwanted communities through various programs with the support of government and from self-generated Local Communities contributions through fees. Since we keep the community in designing of an intervention through proposal preparation, implementation, monitoring and evaluation we could able to achieve the desires and demands of the disadvantaged more comprehensively. In the mentioning year we considered huge need of climate change effect on the disadvantaged communities in their poverty eradication programs and livelihood sustainability. Considering this we have organized ourselves in energy and environment conservation, climate change mitigation practices and combat against exploitations. In harnessing the rich inherited knowledge and experience of poor we have planned to accommodate the most vulnerable and deprived communities in capacity building, cadre building and socio-economic and political empowerment. TNSRO in its journey through the development of disadvantaged sections continues with the support and coordination of humane people like you and local grant agencies. I am extremely indebted to present this annual report to the communities, supporters for the year 2019-2020. Because of communities participation our interventions have explored new corners. Our sincere and honest pledge to all of you and request the continuation of supports in the coming years as well. Together we would reach new heights and make productive changes in the lives of the deserved. Our institution has received Govt of Tamilnadu Best Institution Award (Ariger Anna Award-State First Prize) for 2011 environmental conservation and educational activities.

I am extremely happy that this 2019-2020 period is a truly one of the big mile stone of our institution. Many of the programmes closely benefited to the community. I express my hearty thanks to all donors, Govt.departments,Panchayat raj institutions, NGO friends and our institutional members for their valuable involvement for our achievements. We would continue to comply with the norms and regulations and legal aspects to demonstrate our transparency and accountability of the organization.

S.Vijikumar Director

1.About us

TNSRO created a greater impact through various types of programmes in different field with the aspects of science and society development. Research and development programmes for villages. i.e. Water resource management, health and hygiene, forest and environment management and social welfare of the rural people. And also TNSRO has been organizing seminar and training workshops related our target issues. Publish and co-publishes books, reports and documents collection for information services, creates and supports other research and social networks of co-operating institution. A multi disciplinary team of TNSRO workers along with the experienced technical and other supporting staff are now pursuing their research and development, social awareness programmes in view of the various development problems of the target area.

The people of Pudukkottai dist. are economically, socially and educationally very backward, it is officially announced by the Govt. of Tamilnadu most of our target groups are belongs to SC/ST/MBC and their families earn livelihood by working as agricultural and constructional labours. The organization is encouraged in the service of the society by popularizing and enhancing public and students understanding of modern science & technology through interactive, popular lecture, exhibit, science club and research activities, thereby creating a scientific temper and social strength. The other sphere of our activity involves planning organization and contact of innovative activities towards education, Social Welfare, Health and Medicine, Rural Development through the scientific approach. The organization is thus involved in the planning organization and execution at rural development programmes.

The overall objective at the TNSRO is to provide expertise and assistance to rural maser in building their capacity to reduce poverty, tackle environmental problem, and assure responsibility for their health and pursuer education. The organization has developed infrastructures consisting at social workers, medical personals, and Para-medicals, to act with a holistic approach. Since India's seventy percent population lives in villages, the key to its long term growth and all round development lies in the development at its rural sector. Despite India's massive development achieved during the last decades, vast number of people still lives in object poverty, often without accepts to basic health care education, clean drinking water and sanitation, employment opportunities.



2. Organization Profile

1	Name of the Organization	TAMILNADU SCIENTIFIC RESEARCH ORGANISATION
2	Acronym	TNSRO
_	Registered Address	No.11, NAGAPPA ROAD,
3		ARIMALAM - 622 201.
Ŭ		Pudukkottai ,TamilNadu
	Administration office	No. 39,Mura Bhavan, Koodal Nagar
4	Address	Rajagopalapuram Post,Pudukkottai-622003
		TamilNadu, India
5	Phone Nos.	04333-261088, 9952886637, 8778365515
,	E. mail	tnsroindia@gmail.com
6	Website	www.tnsroindia.org.in
	Legal status	
	(a) Nature of the organization	Registered Voluntary organization TRUST
7	(b) Registered Act	Indian Trust Act 1982
	(c) Regd.No.	No:542/BK4/97 dated: 31.10.1997.
	(d) Place of Registration	District Registrar Office, Pudukkottai
	Income Tax Registration	
	(a)Tax Exemption Registration	1961
8	(b)80GG Registration No.	6162E(33)/2002-03, 29.10.2002.
0	(c)12AA Registration No.	6162E(33)/2002-03, 29.10.2002.
	(d) Place of Registration	Commissioner of Income Tax-I, Tiruchirapalli.
	(e) PAN Card No.	AAA TT 9322J dated: 04.11.1997
9	Affiliation	
	(a) For vocational Education	Bharat Sevak Samaj,
		National Development Agency
		Promoted by Govt; of India.
		Affiliation No: TN 598/2006 Dated: 28.8.2006
	(b) For Science	Vigyan Prasar,
	Popularization	Dept. of Science & Technology,
		New Delhi. Affiliation No: VP-TN0090
		Dated: 27.10.2017
	Publication	Indian Journal of Natural Sciences (IJONS)
9A		ISSN: 0976 – 0997 / Dt.15.03.2010
		Established Year : 2010
	Banking Details-1	
	Name of the Bank	Indian Bank (IB)
10	A/c. No.	850149667
10	Type of A/c	Saving
	Branch Code	1372, Rajagopalapuram
	IFSC /RTGS Code	IDIB000P137

	Banking Details-2	
10A	Name of the Bank	Allahabad Bank (Indian Bank)
	A/c. No.	50200527185
	Type of A/c	Saving
	Branch Code	01815, Pudukkottai
	IFSC /RTGS Code	ALLA0212291
		Member in Tamilnadu Federation of
		voluntary Agencies, Chennai
11	Membership	Regd.No.718/2007
		Member in Network for Rural Development,
		Pudukkottai Dist.
	NGO Partnership system	Registered with NGO DARPAN,
12		Govt. of India.
		Unique ID.TN/2010/0031352
	Chief Functionary/ Director	Dr.S. VIJIKUMAR
13		Director,
		Tamilnadu Scientific Research Organisation
		No. 39,Mura Bhavan,Koodal Nagar
		Rajagopalapuram Post, Pudukkottai-622003.
		TamilNadu, India

3. Vision and Mission of the Organization

Vision

To improve the resources of our nation and rural prosperity through the application of science & technology and also we dedicate the sustainable development of agriculture, ecology, health, education, employment and food security by the way of transferring valuable informations and action research with the community response and participation.

Mission

To provide expertise and assistance to rural community in building their capacity to reduce poverty, tackle environmental problem and promote sustainable agriculture, rural prosperity assure and responsibility for their health and pursuer education through science and technological application.

4.Objectives

- To promote popularization of science & technology among the public and students by way of organizing awareness programmes, seminars, lectures, exhibitions, training Programmes and research activities.
- To identify areas for the applications of science & technology for the developmental needs, in particular, to the prevailing conditions of backwardness, rural, unemployment and poverty.

- To form and maintain farmers field schools, farmer's science clubs, students science club and youth clubs.
- To formulate and implement any successful environmental programme it is necessary to make it socially relevant
- To institute awards & fellowships for distinct fellow in the field of environmental conservation and science popularization.
- To formulate and implement the community based health promotional programmes.
- To conserve our biodiversity through the effective implementation plan.
- To promote and conduct research and development programmes in the field of health, environment, agriculture, education etc
- To publish research journals, books and local community news paper in the view of promotion of environmental science.
- To encourage the rural community in Sustainable Agriculture through Natural farming.

Current Target Area: - Pudukkottai District and Tamil Nadu.

Major Target Groups: - Rural Communities, Small Marginal Farmers, Land less Farmers and labourer, Students, Youth groups, SC/ST weaker sections, Rural Teachers, Women groups, Techno entrepreneurs, Innovation groups, BPL groups, Children groups and under privileged groups etc.

5. Board of Managing Committee

S.No.	Name	Address	Qualification	Designation
	Dr.S.Vijikumar	No. 39, Mura Bhavan,	D.Sc.(A.M.)	Director/
		Koodal Nagar,	FNVA.,	Managing
1		Rajagopalapuram		Trustee.
		Post,Pudukkottai-		
		622003,		
		TamilNadu,India.		
	V.Muthulakshmi	No. 39, Mura	D.M.L.T.	Financial
		Bhavan,Koodal Nagar	NVA. Fellow	Trustee.
2		Rajagopalapuram		
		Post, Pudukkottai-622003		
		TamilNadu,India		
	A Comathy Shankar	Sivapuram,Pudukkottai	B.E.,	Trustee.
3	A.Gomathy Shankar	TamilNadu,India		



6.TNSRO Hierarchy

ORGANISATIONAL CHART			
	Managing Tru	stee / Director	
Financial Trustee/ Project Officer	Scientist	Project Associate -1 Planning & Training	Project Associate -3 Information & Communication
Accounts Assistant	Project Associate -2 Research &	Project Management Workers	Field Assistant
Social Volunteers			

7.TNSRO working fields

- Bose Science Society Science popularization
- Bio tech for Villages Village promotion through Biotechnology
- Climate change –IEC and Research Activities
- Conservation of Biodiversity.
- ICT for Rural Prosperity-Village Information Centre (VIC)
- Environmental Education and Conservation-Village Biodiversity School, Tree plantation
- Community College Programme
- Vocational Education and Training Self Employment Generation.
- Plant Science Research Division Medicinal Plants Research
- Protection of Indigenous Culture and Knowledge System-Documentation and Research.
- Farmers Training School- Farmers Promotion and Development
- Publication and Library Division- Publish journals & Books, Library develop. Village Health Services-Free Medical Camps
- Disaster Risk Management- Training and Research
- Community Radio Programme

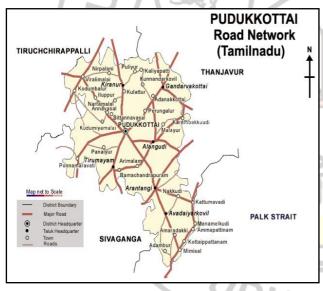


8. Staff Particulars

S.No.	Name	Qualification	Designation	Part time/ Full time
1	Dr.S.Vijikumar	D.Sc (AM).,FNVA.,	Director	FT
2	Mrs.V.Muthulakshmi	MLT, FNVA	Project Officer	FT
3	Dr.E.S.Karthy	M.Sc., Ph.D., PGDBF	Research Associate	PT
4	Mr.K.Ramanathan	M.Sc.,M.Phil.,	Research Associate	PT
		PGDHM.,(Ph.D)		
5	Mr.C.Karthikeyan	M.Sc.,M.Phil.,	Admin. Officer	FT
6	Mis.V.Bhuvaneshwari	M.Sc., M.Phil., DAAP	Project Associate I	PT
7	Mis.V.Priyadharshini	M.Sc., DAAP.,	Project Associate II	PT
8	Mis.C.Nagajothi	M.Sc.,	APO	FT
9	Mis.V.Sandhya	HSc.,	Office Assistant	FT
10	Mrs.Pichaiyammal	-	Sweeper	PT

9. Project Area Details

District Profile



Pudukkottai District was formed on 14 January 1974 by merging Pudukkottai revenue division of Trichy District and Arantangi and Avudayarkoil taluks of Thanjvur District. The district is bounded by Tiruchirapalli in the North and West, Sivagangai District in the South and Bay of Bengal and Thanjvur District in the East. The district lies between 9' 50' and 10' 40' of the northern latitude and 78' 25' and 79' 25' of the eastern longitude. It comprises 9 taluks, 13 development blocks and 764 revenue villages.

The district is generally a drought prone area an analysis of the rainfall data of the previous 10 years brings to light that expect for the three years of 1998, 2004 and 2005 the district witnessed deficient rainfall; and the deficiency ranged from 0.3 (1996) to 30% (2003). The total population of the district as per the 2001 census was 1459601 comprising 724300 males and 735301 females. There are 3 Major Rivers flowing through the district decides small rivers. However, they do not from the main source of irrigation as they are jungle streams and remain dry for most part of the year. As such, tanks are the major source of irrigation in the district, followed by canals and wells. The net irrigated area in the district is 70 percent of the net cropped area. The major food crop cultivated in the district is paddy covering around 1.02 lake hectares representing about 64 percent of the net sown area. Groundnut is the major oilseed crop grown in about 30500 hectares. The other crops include millets, pulses, sugarcane, banana, and cotton. The district is industrially backward. There is no industrially graded raw-material expect pockets of

granite deposits. Irregular power supply and acute water shortage stand in the way of speedy industrialization. A sugar factory has been set up in the private sector which covers majority of the farmers growing sugar cane in the district.

Historical brief

Pudukkottai was formerly one of the princely states of India. It was under different dynasties during the first half of the 15th century and under Mughals till the 17th century. Thereafter Pudukkottai came under the suzerainty of the Thondaiman Kings who had reined the state till it was merged with the Government of India after independence. The Thondaiman Kings were noted for the able and clean administration. During their rule they have augmented creation of irrigation sources for agriculture, evolved a sound revenue administration, education systems etc., the palatial administrative buildings for public offices constructed during their period are still remaining as monuments and serving the same purpose till date. The noted British administrator Alexander Loftus Tottenhem was the administrative executive under the Thondaiman rulers. He evolved the famous "Tottenham System" of file maintenance and other office procedures, which are still being followed by government departments with a little change then and there.

Revenue Administration

There are two revenue Divisions namely Pudukkottai and Aranthangi. There are nine taluks and thirteen Panchayat unions with 763 revenue villages and 498 village panchayats. There are also two Municipalities and eight town panchayats in this District.

Soil Type

According to Geological reports rocks, granite, stone and limestone occurs in this District. White clay and other building stones are available in plenty.

Industries

Pudukkottai is one of the industrially backward district of Tamil Nadu. The total numbers of small-scale industries are 634.

Historical Architectural Monuments

There is one famous Shiva Temple at Avudaiyarkoil. It is internationally famous for its beautiful stone sculptures. Viralimalai in Madurai - Trichy High way is a pilgrim centre where a beautiful temple is situated over the hilltop for Lord Murugan. Sithannavasal is a tourist attraction in this district, where one can see the rock beds and cave temples erected during the Samana period.

Road Communications

This District is sufficiently linked with other parts of the country with Railways and Highways.

General

The nature of the district is purely agrarian with the major crops Paddy, Banana, Sugarcane, Groundnut and cashew nut. There is an All India Pulses Research Station at the village "Vamban" and one State Agricultural farm at Kudumianmalai.

Predominant economic activities of the district

Agriculture is the predominant economic activity being pursued in the district. There are no major industries in the district. Dairy and goat/sheep rearing are the allied activities pursued in villages. Synthetic gem cutting is being done in Viralimalai block of the district. Stone and granite quarrying are the other economic activities worth mentioning.

Major food / commercial and plantation / horticulture crops

Paddy is the major crop cultivated in the district covering around 102750 hectares forming 64 percent of the net sown area followed by groundnut in an area of 30544 ha. The other major crops are sugarcane, millets, gingelly, cotton and pulses. Among the horticulture crops, cashew nut tops the list covering an area of about 15432 ha. Followed by coconut in an area around 4067 ha. Further, the district has around 6418 ha under fruit crops like mango, banana, acid line, etc. Vegetables are also cultivated in an area of 2586 ha. The area under sugarcane has been increasing since the commissioning of a sugar factory under private sector in the district.

Special/additional/other features of the district

Other economic activities include stone quarries, granite quarries, coir rope making, marine fishing, gem cutting, small business, mat weaving, pottery, pith work, etc.

Other factors affecting the district

The district is generally a drought prone area. The industrial progress in the district is sluggish due to low capital formation and absence if any raw material.

10.PROGRAMMES /ACTIVITIES 2019-2020

P.1.Jal Sakthi Abhiyan Awareness Programme

Government College of Education, Tamil Nadu Scientific Research Organization, Rotary Club, Central Rotary Club jointly organized various competitions at Government College of Education on 22.07.19. Dr.M.Anbucheziyan, Principal (i/c), Government College of Education graced the Education. Mr.R.Anbzhagan, Manager, Reliance Foundation was the chief guest and Rtn.K.Baseer Mohammed, Seceretary, Central Rotary Club hoisting the flag and inaugurated the rally. The rally focused on Rain Water Harvesting and it begins from Thiruvalluvar Nagar to Old Bus Stand. There are above 50 students and faculties took part in the occasion.



P.2.Spirulina Training Workshop Programme

Tamil Nadu Scientific Research Organization and the department of Food and Nutrition and Botany, Sri Sakthi Kailash Women's College jointly organized one day workshop on 25.07.19. Dr.Jeyanthi, Principal, Sri Sakthi Kailash Women's College inaugurated the function. Dr.S.Vijikumar, Director, Tamil Nadu Scientific Research Organization delivered a special address. He explained about properties of Spirulina, cultivation methods and applications. Spirulina harvesting and nutritional factors are also discussed in this lecture. The Hands on training on spirulina cultivation was interacted with the students. There are 150 students and faculties took part in the occasion. The arrangement of the function made by the Sri Sakthi Kailash Women's College.



P.3.Science for Development Programme & Funding Opportunities and Proposal Making Programme

Tamil Nadu Scientific Research Organization, Pudukkottai and GTN Arts and Science College, Dindigul jointly organized Science Development Programme on 27.07.19. This program creates awareness about the science and its development. Dr.K.Rettinam, Director, GTN Arts and Science College, Dindigul presided over the function. There are more than 500 students from all the departments took part in the function. The resource person highlighted the importance of opportunities in all fields and discussed about the research, environmental management and other areas. Students are interacted with the resource person and got ideas about research in present scenario. In the afternoon session, resource person interacted with the faculties and discussed about the funding agencies

and project proposals. The principal of the college proposed vote of thanks. The college makes the arrangements for the function.



P.4.9th National Conference on Natural Sciences & Award presentation ceremony

Bose Science Society and Pushkaram College of Agricultural Sciences jointly organized 9th National Conference on Natural Sciences (NACON) on 24.08.2019. Dr.S.Vijikumar, President of Bose Science Society presided over the function. Dr.C.Anantharamakrishnan, Director, IIFPT, Thanjavur was the chief guest for the occasion. In the present scenario, our country has gradually developing in the field of Food Processing. The goal of food processing industries is to provide the source of food for all peoples because of our country is having highest population. Science plays a vital role in the invention of new developments and it addresses the problems in the field of agriculture with the help of IIFPT. In this occasion, Bose Science Society presented the awards for achievers in the field of physics, chemistry, mathematics, biological sciences, agricultural sciences, medical sciences, statistics and environmental sciences. There are more than 200 participants from various universities, colleges and research organizations took part in the occasion. Mr.K.Ramanathan, Secretary, Bose Science Society proposed vote of thanks. Bose Science Society and Pushkaram College of Agricultural Sciences made the arrangements for the function.





P.5. Sustainable Agriculture and its Impacts on Environment Programme

Tamil Nadu Scientific Research Organization, Pudukkottai and Department of Civil Engineering and Chemistry, Anna University jointly organized one day seminar cum workshop on 03.10.19 at Anna University. The faculty members Dr.R.Thiruneelakandan, Dr.K.Kanimozhi and Dr.V.Tamilmani from department of chemistry participated in the workshop. The faculty members from Dr.S.E.Nithya and Dr.R.Viji from the department of Civil Engineering took part in the workshop. There are more than 100 students actively participated in the workshop.

The importance of agriculture and organic farming were discussed in the seminar. They are also discussed about the agricultural wastes and vermicomposting. This workshop imparting knowledge on biofertilizer and chemical fertilizers. It also provides a comprehensive knowledge on sustainable agriculture and its impacts on environment. Students are insisted to create awareness about organic farming among the people. In this workshop, preparation of biofertilizers and Azolla production were also discussed. Students are interacted with the resource person and got comprehensive idea about azolla production and organic farming. The arrangement of the function made by the Department of Civil Engineering and Chemistry, Anna University. Dr.K.Kanimozhi, Assistant Professor, Department of Chemistry proposed vote of thanks.



P.6.Special Lecture on Historical Evidence in Astronomy & Astrophysics Programme

A Special lecture on Historical Evidence of Astronomy and Astrophysics organized on 17.10.2019 at Sri Venkateswara Matric Higher Secondary School, Thirukokarnam, Pudukkottai. Dr.S.Vijikumar, Director, Tamil Nadu Scientific Research Organization delivered a lecture on historical evidence of astronomy and astrophysics. In his lecture, he explained about how the world came to be. He also discussed about the wonders of the sky. Students are interacted with the resource person. Mr.Thangamoorthy, Head Master inaugurated the function. There are more than 200 students took part in the function and got comprehensive knowledge about Astronomy and Astrophysics. The arrangement of the function made by the office administrator of Sri Venkateswara Matric Higher Secondary School, Thirukokarnam, Pudukkottai.



P.7. District Level Interschool Science Exhibition Programme



Scientific Nadu Research Tamil Organization, Pudukkottai and GTN Arts and Science College, Dindigul jointly organized District Level Inter School Science Exhibition held at APJ Abdul Auditorium,GTN college Kalam on 05.11.2019. Dr.P.Balagurusamy, Principal presided over the function. The participants are from 50 schools including Government Schools, Government Aided Schools and Private Schools took part in

the Exhibition. The students are exhibited their talents in the competition. Their exhibitions focused on Environmental management, Pollution Control, Importance of Agriculture, Water Management, Green House Effect, Mechanism behind satellites, organic farming, industrial production etc. Tamil Nadu Scientific Research Organization presented a grant sum of Rs. 5000/- and appreciation certificate for the first prize won by the government school student. The programme was coordinated by the Department of Mathematics and Zoology, GTN Arts and Science College, Dindigul. Dr.J.Sathyabama, Assistant Professor, Department of Chemistry proposed vote of thanks.

P.8. Science Popularization Programme

Tamil Nadu Scientific Research Organization, Bose Science Society and District Central Library organized Science Popularization Programme on 19.11.2019 at District Central Library, Pudukkottai. Ms.Sasikala, Librarian of District Central Library, Host Swaminathan, Dr.S.Vijikumar, Director, Tamil Nadu Scientific Research Organization, Pudukkottai and Ms.Usharani., Asst.Professor,Dept.of Tamil., Sri Bharathi Arts and Science College, Pudukkottai participated in the programme and offered felicitations. There are 50 students from Govt. School, Santhaipettai and book readers took part in the programme. The importance of library, how the books are to be read and used, books catalogue are discussed in this programme. The role of science in our day today activities was also discussed in this programme. The students from the Govt. School, Santhaipettai exhibited their talents.



P.9.Entrepreneurship Skill Development Training Programme

Tamil Nadu Scientific Research Organization, Pudukkottai and Department of Zoology, Seetalakshmi Atchi College for Women, Pallathur jointly organized Entrepreneurship Skill Development Training Programme on 19.12.19 & 20.12.19. Dr.S.Ramuthai, Prinicipal, Seetalakshmi Atchi College for Women, Pallathur presided over the function. The Head, Department of Zoology graced the occasion. There are more than 100 students took part in the programme. Nowadays, Women play a significant role in all fields. Girl students are insisted to become a great entrepreneur. They are acquiring knowledge on financial assistance and other schemes for entrepreneurs. When compare with previous years, in future women can play a vital role in all fields. Nowadays, women can actively work in industries, medical filed, science, technology and research. Mr.Anbarasan from Reva Herbs gave the training to the participants to become an entrepreneur. He provided Hands on training on Soap, shampoo and other herbal product preparation. The Head, Department of Zoology, Seetalakshmi Atchi College for Women proposed vote of thanks. The Department of Zoology, Seetalakshmi Atchi College for Women, Pallathur and Tamil Nadu Scientific Research Organization, Pudukkottai made the arrangements for the function.



P.10.Student Summer Research Programme

Numerous UG and PG understudies from different Colleges moved toward TNSRO for their Summer Training Project work. TNSRO Conducted Summer Training and Research Programs for the understudies depend on their Interest. We are starting the Summer Research Programs with appropriate preparing in Research Methodology. In the wake of finishing the Training program, the understudies can go for the Research work. We are giving Summer Research Program. A proper manner to beautify mastering enjoy is to have interaction with the researcher and supervisor Do encourage your interactions to the laboratory. In many labs, deliberate and spontaneous social activities are common... Undergraduates should improved knowledge of lab technology and then lab activities because "it gives you a better feel for how they are in science. The students from SRM University, Chennai, Bharathidasan University, Trichy, Dr. Umayal Ramanathan College for Women, Karaikudi and JJ College of arts and science pudukkottai took part in the Summer Research Programme and they got comprehensive ideas about the Research and development.



P.11.International Day of Women and Girls in Science Programme

International Day of Women & Girls in Science was observed on 11.02.20 at Tamil Nadu Science Forum, Pudukkottai. Dr.Latha, Scientist & programme coordinator, Kirishi Vigyan Kendra, Vamban, Pudukkottai delivered keynote address. Dr.S.Vijikumar, Director, Tamil Nadu Scientific Research Organization delivered a special address. In his address, he highlighted the importance of women and the role of women in all fields. Dr.S.Alagumanian, Head, Department of Botany, Dr.Rajalakshmi and Prof.S.Saravanan, Professors, Department of Botany, H.H.Rajah's College, Pudukkottai took part in the function. The Director of Tamil Nadu Science Forum proposed vote of thanks.



P.12.National Youth Science Conference for Sustainable Development and 10th Bose Science Society Award Presentation Ceremony programme

National Youth Science Conference for Sustainable Development and 10th Bose Science Society Award Presentation Ceremony was held at Pushkaram College of Agricultural Sciences, Pudukkottai on 28.02.2020. Mr.Rajaram, Administrative officer presided over the function. Dr.S.Vijikumar, President, Bose Science Society welcomed the gathering and introduce the chief guest. He highlighted the activities of Bose Science Society and motivates the participants. He Dr.Rajanderan, Professor, St.Peter's Arts and Science College, Dindigul was the chief guest. In his address, he brought up the importance of science and research. While he delivered a special address, he said that our students are having unique talents. They play a vital role in the field of science and technology and they have the ability to give new inventions. If they are having awareness and interest in their field definitely they can reap the success in any field. He motivated the participants with self confidence, believe, truth, interest and willingness. He insisted the participants to improve their self confidence. Failures are the stepping stone to success, he quoted. He insisted the researchers to perform the research in the field of agriculture, medical science, solid waste and water waste management and also insist the researchers to file the patents for their inventions. There are 32 papers presented from various fields of science in this conference. There are more than 150 research scholars, scientists, faculties and students took part in the conference. Bose Science Society presented the awards for the achievers in various fields of science. Mr.K.Ramanathan, Secretary, Bose Science Society proposed vote of thanks. Bose Science Society and Pushkaram College of Agricultural Sciences made the arrangement of the function.



Bose Science Society

- 1. Students Wing The School Students can join in our society with free of cost
- 2. Professor Wing The Professors, Scientists, Research Scholars are joined as a member in the Bose Science Society.

Every year, Bose Science Society consented to issue the awards to the Scientists, Professors and Research Scholars based on their qualification and research publications. Bose Science Society conducted Awareness Programmes to the School students every year. The members from the professors wing may provide their contribution to the programmes in any way. There are 742 members in Bose Science Society joined as a Fellow Members. Our Society has been selected as a **"Bronze Category Club"** by Vigyan Prasar, DST for science popularization activities.

P.13.Indian Journal of Natural Sciences-Research Publication



TNSRO has been publishing **Indian Journal of Natural Sciences** -**IJONS** from **August 2010**. Also the board of management approved the agenda for journal establishment with ISSN registration (0976-0997). The Journal is peer reviewed **International Bi monthly Journal** for publication of Original Research papers /Reviews/ Short communications/ Book reviews/Reports on conferences/ Seminar, Important events, News of interest etc. IJONS published by our Institution was running successfully. Famous Scientific Information, Research Solution have been published. Above 100 and above Scientists and Professors have joined as a member from India and abroad.

Indian Journal of Natural Sciences established in the year 2010 and it plays a vital role n the publication of Research Papers. Till now, we have published 58 issues (upto March 2020). The authors from our country and other countries published many research papers in the Indian Journal of Natural Sciences. There are 155 Research papers published in the volume 9 and 10. Many of the research papers focused in the field of Chemical Sciences, Physical Sciences, Agricultural Sciences, Veterinary Sciences, Geosciences, Mathematics, Engineering and Technology, Information and Communication, Biotechnology, Biomedicine, Medical Science, Computer Science. These Research papers insisted to save the Environment and protect the rare plant and animal species. We are proud to say that Indian Journal of Natural Sciences indexed by Clarivate Analytics (Thomson Reuters) and got NAAS Rating 3.56/2020. Our Journal focused in various international databases. we have got the impact factor of ISRA – 4.918, ISI - 1.628 and Root Index - 5.79. More than 100 Professors and Scientists are Editorial Committee and Review Committee member in IJONS.IJONS ready to publish the events and activities conducted in the Universities and Colleges and new innovations done by the students.

P.14.School of Holistic Health Sciences and Research



(SHHSR) has established under the charter of our TamilNadu Scientific Research Organisation for educational objective of providing high quality instruction and therapeutic programs which utilize the mind and bodies own rejuventive powers through the natural modalities of Acupuncture, Bach Flower Remedies, Herbal Remedies and Nature cure techniques. The School will offer therapeutic educational programs to move individuals /

practitioners to greater understanding and experience of perfect health, rejuvenation, transformation and higher states of awareness and up gradation of skill based training by distance mode and personal contact programme. From the most tangible studies on the physical plane to the most esoteric in exploration of consciousness, the school seeks to provide quality instructors and course material to aid the students/ practitioners in achieving the greatest proficiency and reaching the highest attainment of truth and knowledge in their chosen focus of study.

This course is a unique opportunity for individuals of all ages to explore comprehensively the arena of Complementary and Alternative medicine. This course is aimed at providing a comprehensive understanding of a number of popular natural and holistic therapies and achieving sufficient qualifications to engage in professional practice. The PG Diploma Holistic Health Science Certificate issued to 06 students those who done their PG Diploma Programme in the TNSRO SHHSR which was started in the academic year 2019-2020. The alternative medicine includes Bach flower Medicine, Aromatheraphy, Herbal Remedies, Biochemical Remedies, Nature Cure techniques has the ability to control the disease. The English Medicine, Auyurveda, Sidha, Homeopathy are also an effective remedies for the various diseases. The main aim is to create the talented Holistic Health Therapist to solve many problems. The peoples can avail these medicines through NGO or Rural Community Health Center. These studies can available only in the distance education but in the TNSRO we can initiate this PG Diploma Programme with our own syllabus focused on Rural Holistic Medicines and alternative medicines. TNSRO SHHSR creates a pathway to pursue the research in the field of Holistic Health Medicines.

P.15.Medicinal Plants Conservation Programme



TNSRO organized the Environmental Awareness and Conservation Programme on at Arimalam. Dr.E.S.Karthy, Director, AWE CARE, Erode was the chief guest and delivered the special address. In his address, he highlighted the importance of medicinal plants. Traditionally there are lot of herbs used for the ailments related to different seasons. Although herbs had been priced for their

medicinal, flavoring and aromatic qualities for centuries, the synthetic products of the modern age surpassed their importance, for a while. people are returning to the naturals with hope of safety and security. It's time to promote them globally. He has created the importance of Medicinal plants Awareness to the people and they got good knowledge about the Medicinal plants conservation.

P.16.Observation of National Days



Tamil Nadu Scientific Research Organization conducted a programme for the school students on observation of National Days particularly Biodiversity Conservation Day at TNSRO premises. Dr.S.Vijikumar, Director, TNSRO, Pudukkottai was the chief guest and delivered the special address. In his address, he insisted to observe Biodiversity

Conservation Day on every year 22nd May. Also He insisted to protect the the natural environment, which is provides a great pleasure to human beings with its shape, structure, senses and color, which enriches people's culture. Activities such as visits to animal parks, bird watching, nature art, and cultural heritage as ways of enjoying and appreciating nature are only made possible through biodiversity conservation.

Every year, 5th June we observed as World Environmental Day. In this day programme our chief guest Mr.A.Gomathy Shankar, Director, Rolland foundation has attended this function. He insisted to protect the environment by awareness creation on World Environment Day. It is the greatest yearly occasion on the planet run by the United Nations to stamp the natural mindfulness among the individuals. Its primary target is to bring issues to light among individuals to secure the climate by taking a gander at different issues with respect to singing issues of climate contamination, exceptional climatic changes, nursery impact, a worldwide temperature alteration, dark entire impact and so on. S.Vijikumar director ,TNSRO has delivered a special speech in this obervational day occasion. In our Country we are celebrating, every year August 15th as an Independence Day.Our chief guest Dr.Ravinder singh, Professor and head, Department of botany, Vivekananda College attended the event and hoisted the national flag then he spoke about our national integration and patriotism. He remind about the freedom fighters and his life style. He insisted the students to be patriotist and serve for our nations. He also quoted the importance of freedom and Education. He explained about Mahatma Gandhi and its protest for getting independence. Our institution director felicitated the gathering.

Every year in our country, we have observed 26th January as Republic day and extending the message about the Indian Constitution and Democracy. In this occasion Students are actively participated and keenly observed. Our chief guest delivered a special lecture on science and education. The guest faculty was pointed out about Books are important information resources and they are important for quality education. This book is essential for students developing knowledge. Every student is wanted to know scientists biography and innovative technical science.

10.Partner Organizations



The TNSRO partners with select organizations. These partnerships vary in nature, depending on the identified need —and can be technical, financial or strategic. The Foundation maintains a broad network of contacts in all key areas, is constantly scouting for innovative rural technologies, and for

the organizations doing high quality work in the area of rural development.

- Technical Partnerships-AWE Care analytical and Research Laboratories, Erode.
- Community Awareness Rural Development Society, Gandarvakkottai
- Strategic Partnerships- Rural Development Organisation, Pudukkottai
- Educational support partnership- Bon securs College for women, Thanjavur,
- Holy Cross College, Trichy & Nagercoil
- NGO partner Roland foundation, RDO, Pudukkottai.

11.MoU signing Institutions

Tamil Nadu Scientific Research Organization signed MoU with following Educational and Research Institutions.

- 1. Seethalakshmi Achi College for Women, Pallathur, Sivagangai District on 05.07.2019
- 2. Pushkaram College of Agricultural Sciences, Pudukkottai on 24.08.2019
- 3. Holy Cross College, Nagarcoil on 05.09.2019
- 4. Shri Sakthikailassh Women's College, Salem on 28.11.2019

With this, Tamil Nadu Scientific Research Organization signed MoU with 16 Institutions. We have planned to establish Tissue Culture Technology, Medicinal Plants Conservation, Bioenergy Production and Bioproducts laboratory.



12. Awards and Appreciation for Environmental Education and Awareness



In 2013 our organization has received best institution award (Aringer Anna Award) from Department of Environment, Govt. Of TamilNadu for best efforts and services in the field of Environmental awareness and education since 1997.Our hon'ble minister of environment and forests Mr.Pachaimal issued to our hon'ble director. **Mr.Mallaseppa**

IAS, Hon'ble director of environment and Principle secretary Mr. **Mohan Verghese Chunkath** IAS also appreciated our organizations best activities in the field of environment. Already our organization has received 2 times (2008 & 2010) from peace trust, regional resource agency, ministry of environment and forests, Dindigul for NEAC programme.

13. Future Plans and Activities

- Biodiversity conservation –flora and fauna species diversity Endangered conservation
- Publish books and magazines related biodiversity and environmental issues and medicinal plants.
- Sustainable Agriculture for Food security
- Popularize biotech application for rural prosperity
- Herbarium centre for research and conservation
- Phytochemical analysis for herbal drug research
- Climate change and water conservation
- Community Radio Programme

14. Available Facilities

- Laboratory •
- Research Library with reference texts •
- Training Hall •
- Computer with Internet facility •
- Herbarium •
- Bioinformatics and other life science research facility etc. •

15.Our Auditor

Mr.S. Jayaraman, B.Sc,F.C.A., Charted Accountant Regd No. 200/27903. 7A, Visalakshi Nilayam, Marthandapuram, Pudukkottai - 622 001

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