



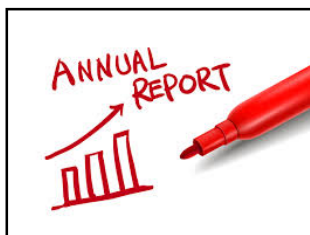
# TAMILNADU SCIENTIFIC RESEARCH ORGANISATION

Pudukkottai, TamilNadu, India, [www.tnsroindia.org.in](http://www.tnsroindia.org.in)



## ANNUAL REPORT 2017 - 2018

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# **21<sup>st</sup> Annual Report**

## Forward

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We have great pleasure in presenting you 2017-2018 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 2016-2017. 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 2017-2018 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	<b>TAMILNADU SCIENTIFIC RESEARCH ORGANISATION</b>
2	Acronym	<b>TNSRO</b>
3	Registered Address	No.11, NAGAPPA ROAD, <b>ARIMALAM</b> – 622 201. Pudukkottai ,TamilNadu
4	Administration office Address	No. 39,Mura Bhavan,Koodal Nagar Rajagopalapuram Post,Pudukkottai-622003 TamilNadu,India
5	Phone Nos.	04333-261088, 9952886637
6	E. mail Website	tnsroindia@gmail.com www.tnsroindia.org.in
7	<b>Legal status</b> (a) Nature of the organization (b) Registered Act (c) Regd.No. (d) Place of Registration	Registered Voluntary organization TRUST Indian Trust Act 1982 No:542/BK4/97 dated: 31.10.1997. District Registrar Office Pudukkottai
8	<b>Income Tax Registration</b> (a)Tax Exemption Registration (b)80GG Registration No. (c )12AA Registration No. (d) Place of Registration (e) <b>PAN Card No.</b>	1961 6162E(33)/2002-03, 29.10.2002. 6162E(33)/2002-03, 29.10.2002. Commissioner of Income Tax-I Tiruchirapalli. <b>AAA TT 9322J</b> dated: 04.11.1997
9	<b>Affiliation</b>	
(a)	For vocational Education	Bharat Sevak Samaj, National Development Agency Promoted by Govt; of India. AffiliationNo: TN 598/2006 Dated: 28.8.2006

(b)	For Science Popularization	Vigyan Prasar, Dept. of Science & Technology, NewDelhi. Affiliation No: VP-TN0090 Dated: 27.10.2017
10	<b>Banking Details</b> Name of the Bank A/c. No. Type of A/c Branch Code IFSC /RTGS Code	<b>Indian Bank (IB)</b> <b>850149667</b> <b>S/B</b> <b>01815, Arimalam</b> <b>ID IB 000 133</b>
10 A	<b>Banking Details</b> Name of the Bank A/c. No. Type of A/c Branch Code IFSC /RTGS Code MICR Number	<b>ALLAHABAD BANK</b>  <b>50200527185</b>  <b>S/B</b> <b>01815, Pudukkottai</b> <b>ALLA0212291</b> <b>622010002</b>
11	<b>Membership</b>	Member in Tamilnadu Federation of voluntary Agencies, Chennai Regd.No.718/2007 Member in Network for Rural Development , Pudukkottai Dist.
12	NGO Partnership system	Registered with Planning Commission ,Govt of India. <b>Unique ID.TN/2010/0031352</b>
13	Chief Functionary/ Director	<b>Dr.S. VIJIKUMAR</b> 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 TamilNadu.**

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

### 6.TNSRO Hierarchy



## 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, NEAC etc
- 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

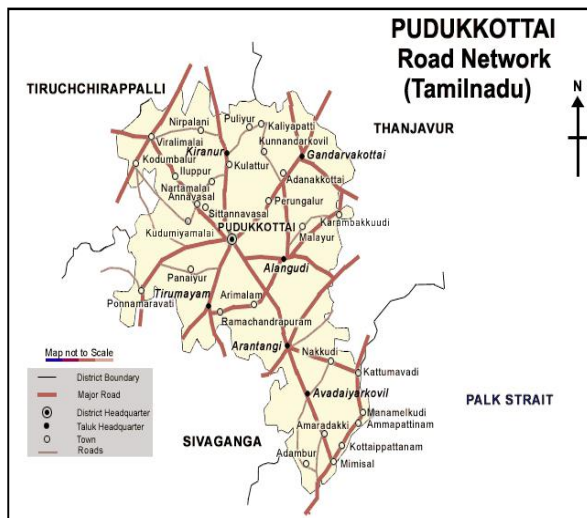
## 8. Staff Particulars

S.No.	Name	Qualification	Designation	Part/ Full Time
1	DR.S.Vijikumar	D.Sc.(AM)	Director	FT
2	Mrs.V.Muthulakshmi	MLT, FNVA	Project Officer	FT
3	Mr.K.Ramanathan	M.Sc.,M.Phil	Research Associate	PT
4	Mis.Shobika	B.B.A	Administrative officer	FT
5	Mis.V.Bhuvaneshwari	M.Sc.,	Project Associate I	PT
6	Mis.V.Priyadarshini	B.Sc.,	Project associate II	PT
7	Mr.Govind		Field worker	PT
8	Mrs.Lakshmi	-	Aya	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 Thanjavur District. The district is bounded by Tiruchirapalli in the North and West, Sivagangai District in the South and Bay of Bengal and Thanjavur 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 lakh 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 Tottenham 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. Sithannaval 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 2017-2018

### 10.1.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.

This year period 407 scientific papers we have been published. It is very proud for us. Next year we are discussing to increase the research papers as above the last year. IJONS have been selected as the icon in the Internet. In 2016-2017 our organization has submitted the journal for NAAS (National Academy for Agricultural Sciences) Rating. The NAAS committee was evaluated our journal and finally declared that IJONS has received 3.56 NAAS rating in 2017-2018. This is the great mile stone of our journey in the field of scientific research. Also our journal has included in Thomson Reuters Master Journal List with Rare Species citation index. The journal was published effective research

articles in past years and also creates more awareness about good scientific publication practice. Our journal is also indexed many web data bases.

## 10.2. 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 rejuvenative 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.

In 2017-2018 totally 11 candidates were registered in this courses. The courses will be taught in a workshop, hands-on situation. With supervision, students will practice the skills learned on fellow students to perfect the techniques. The courses offered are intended to reach all ages of interested students/ practitioners. The practitioners in any course will receive a certificate of completion and proficiency. The practitioners will be able, in many cases, to perform as a self-employed independent experienced / skilled Holistic practitioner or as an employee in a health care setting such as a Holistic Healing Center, Nature cure Clinic, Physical Therapy Department, Wellness Center, Community Clinic, Hospital etc. **Assessment and Certification:** All these courses are certified and accredited by the Board of Examination of TNSRO.

Our Diploma will enable you to improve your practicing skill, job prospects, your lifestyle and that of many others. Examinations take place in April and May. In this plan, one year PGDHSS course have been conducted for traditional or alternative medical doctors who gives treatments in the villages. Now 11 candidates were joined. We are giving training in the division of Acupuncture, Nature Cure techniques, Flower medicines and certificates have been given for trained members.

### 10.3.Environmental Awareness and Education Training programme



**Environmental education** is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, fosters attitudes, motivations and commitments to make informed decisions and take responsible action. Sensitizing groups of the society about the environment issues, enhancing the involvement of local government authorities, social activists group, SHG's federation, community at large in practicing environmentally begin development process, encouraging people to build up the integrated and action oriented environmental conservation programmes.TNSRO has organised the programme at Sivapuram village on 5<sup>th</sup> June 2017 ,75 general public and students actively participated.

### 10.4.National Science Day Celebration



The Day is observed to mark the novel discovery of Raman Effect by the great Indian Physicist Sir C. V. Raman on 28th February, 1928. Raman Effect is a phenomenon in spectroscopy discovered by the eminent physicist while working in the laboratory of the Indian Association for the Cultivation of science, Kolkata. After two years of this discovery, Sir C. V. Raman brought the first Nobel Award for the country in 1930. Hence the National Science Day is a great day for Indian Science and scientific community.

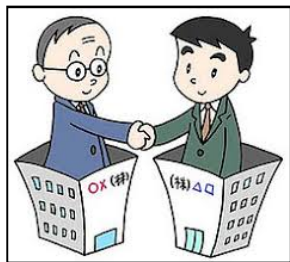


Besides, National Science Day offers an opportunity to bring issues of science on to centre stage. The activities organized on the occasion provide public with an occasion to personally attend various programmes and be aware of the emerging issues of immediate concern. Organizing activities with the involvement of large number of people results into purposeful interaction between the science fraternity and the common people for mutual benefit.

To encourage the student and Children in science we conducted a National Science Day program in selected schools in pudukkottai taluk. In this programme Tamilnadu Scientific Research Organisation, director S.Vijikumar, Roland Foundation director A.Gomathi Shankar, professor Dr.ES Kathi Director,AWE care has given more information about science and research. They gave information in the tittles scientific glory, scientific and research Institutions, new invention, scientist Histories. The programmes are planned to generate awareness among the students, academia, general public, etc. about the importance of Science Day and based on the focal theme through lectures, seminars, Quiz

programmes, exhibitions, film shows, debates, folk forum communication, elocution etc. Totally 120 students actively participated in this programme.

### 10.5.Spirulina EDP Training Programme



Basically, entrepreneurship development is basically the process of improving the skill set as well as the knowledge of the entrepreneurs. This can be done through various methods such as classroom sessions or training programmes specially designed to increase the entrepreneurial acumen. Most of the people don't know what is spirulina. Even they don't know the Value and Advantages of Spirulina. If you are one of then you no need to worry about that. We are here to give whole information on that. Spirulina is nothing but a Blue Green Algae, which is having a huge quantity of proteins. Which can available only in water. Most of the people who are living in other countries use Spirulina as Supplementary Feed. Spirulina Cultivation Training is nothing but taking the training or learning about how to Cultivate Spirulina at Home or for the Commercial use of Spirulina.

One day training programme have been conducted for spirulina cultivation and how to market it. Tamilnadu Scientific Research Organisation director S. VijiKumar conducted this programme. In this programme above 15 youth members have been participated. The programme conducted in Pudukkottai has been started by Mr.A.Gomathy Shankar Managing Director, Roland Foundation ,Pudukkottai .He pointed out "Spirulina is used as a supplementary food and medicine for diabetes, heart disease, cancer and also it is used as a food. By less cost we can cultivate this in our home. For the farmers it gives more income" . The programme has been conducted successfully for the youth.

### 10.6.Summer Research programme

We offer a various standards for testing and we are doing "Testing on Samples" for the following areas for life science research Scholars at M. Sc., M. Phil., and Ph. D., level. In 2017-2018 we enrolled 22 PG scholars for Students Summer Research Project. These fellows are successfully completed their tasks.

In the world today, there are still a lot of people who do not have adequate access to basic needs such as food, water, education, health services and clean environment among others.Medicinal plants address not only the need for access to medicine as a component of health services but also to the need for increased income for farmers and as a significant contribution to the national economy.

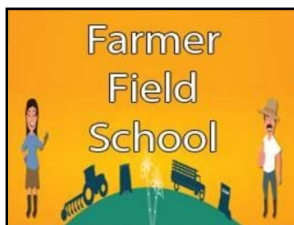




And, yet, a basic foundation to effectively bring about these contributions is to be able to collect, characterize, evaluate the genetic resources that a country has from animals, plants, insects and microorganisms which can serve this purpose. While there have been constraints in exchanges of materials and technology for pharmaceuticals derived from biological organisms, largely because of its very significant commercial value and questions on intellectual property rights, there is no doubt that a critical human need such as access to medicine which determines quality of life of human society will remain as a concern that will require a concerted effort among countries and peoples all over the world. 2017-2018 we conducted 5 selected medicinal plants for evaluating their medicinal properties. And also the students conducted research in water purification by medicinal plants. The research report was published by Scopus indexed Journal.

In TNSRO, we mean and dream possibilities and experiment with each one of them. A failure or a series at failure cannot dissuade us. History is full of people who failed. But their failure often led them to great success. A researcher's success depends to a large extent on his confidence. We should believe in the significance of our efforts and the success that awaits us. Here are the procedural approaches, we provide in order to assist all research fellows.

### 10.7. Farmers Field School Awareness Training Programme on Sustainable Agriculture



The farmer field school is a season long training of farmers involving participatory activities, hands on analysis and decision-making. The field school trainer plays the role of a facilitator rather than an instructor. The objective of the field schools is to give farmers an opportunity to learn and achieve greater control over the conditions they face daily in their fields. Farmers who

participate in field schools learn how to reduce their use of pesticides, improve water



management and soil fertility, enhance their yields and increase incomes. From this initial base, farmers can move into other crops and diversify into other activities related to their agro ecosystems. The ultimate aim of the field school is to improve farmers' knowledge and decision making abilities so they can build up sustainable agricultural systems and enhance food security in their families and communities.

Farmer field school (FFS) is a group-based learning process that brings together concepts and methods from agroecology, experiential education and community development. It also involves regular field observations and group analysis. It is a major undertaking towards the realization of sustainable agriculture as it helps farmers make their own locally specific decisions about crop management practices. Special group activities encourage learning from peers, and strengthen communicative skills and team building. This training course is therefore

intended to help participants to design and implement Farmer Field Schools as an extension practice to promote organic farming and agricultural productivity.

TNSRO FFS works extensively to train women farmers in sustainable agricultural practices, inculcating in them principles of farm management that lead them on the road to self-reliance. Initial intervention activities usually begin with orientation sessions that introduce the principles of sustainable agriculture and outline the harmful effects of chemical farming. They explain the need for a paradigm shift in cultivation practices. Discussions with farmers at an individual as well as community level help them



understand the benefits of these principles so that they may make an informed decision, if they choose to adopt them. After orientation, we conducted intensive training sessions to equip farmers with the technical knowledge to begin adopting these practices. These sessions, constituting several modules, place a strong emphasis on biodiversity conservation and cultivation of indigenous varieties, which inherently require low inputs and respond well to organic preparations. They teach farmers to prepare cost-effective organic inputs at home, thereby enabling them to eschew the use of chemicals. They also teach soil and water conservation methods, optimal integration of various farm processes for efficient recycling of resources and practices such as the SRI method for paddy cultivation which help ensure good yields.

TNSRO has organized 5 block level awareness, capacity building on SA training for food security. Gandarvakkottai, Thiruvarangulam, Pudukkottai, Arimalam and Thirumayam block villages are covered. One of the main objectives of the FFS was to improve rural livelihoods by increasing the productivity of rice cultivation leading to more food security and by increasing income from agriculture through cultivation of locally suitable cash crops. Comprising of a blend of time-tested traditional methods (which have gradually fallen out of use) and scientifically developed modern practices, the training modules provide an alternative farm management system that farmers are often unaware is beneficial to them. These practices cut down costs of cultivation and ensure good yields; moreover, by promoting indigenous varieties well suited to local conditions, they also help strengthen the resilience of farming communities to climate change. Three main modules, developed largely in-house through years of experience, make up the training sessions. The methodology used involves class sessions, field visits, group discussions and experience sharing.

Its impact is visible in Thiruvarangulam and Arimalam block region of Pudukkottai wherein barren lands were converted into lush fields.

### 10.8 .Special Lecture on Swami Vivekananda –National Youth Day Celebration



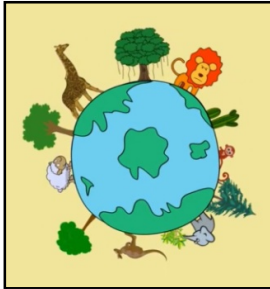
The National Youth Day has been celebrated every year on 12 January – from 1985 it has been an indelible part of India’s tradition. Incidentally, this was also the day when Swami Vivekananda, one of the greatest social reformers, thinkers, and philosophers of India, was born. In fact, the Indian government had declared back in 1984 that Swamiji’s birthday would be celebrated as the National Youth Day. The main aim behind this is to make sure that the students across the country can be encouraged to learn about the life, the ideals and philosophy of Swami Vivekananda and apply them in their lives. It is expected that by celebrating the National Youth Day the youth of India could be inspired sufficiently to set sail on a journey that would ultimately lead them to succeed in life. The philosophy, ideas, and teachings of Swami Vivekananda can justifiably be called national assets from traditional and cultural points of view. At the same time, the youth are the future of our country. It is them who are supposed to take our country forward in the days to come. This is the reason why they have to be inspired to act and think in a positive manner and perhaps the best way to do that is through the teachings of Swami Vivekananda.



Swami Vivekananda inspired millions of youth during his era and continues to do so even today. The government felt that the philosophy and ideals of Vivekananda are a great source of inspiration for the Indian youth. In 1984, the then Government of India said, “It was felt that the philosophy of Swamiji and the ideals for which he lived and worked could be a great source of inspiration for the Indian Youth.” Vivekananda, who died at a young age of 39, had transformed several lives. He drew inspiration from Indian spiritual tradition and from his guru, Sri Ramakrishna Paramahansa. Swami Vivekananda’s lectures have motivated numerous youths and organisations. His teachings have been compiled into ‘The Complete Works of Swami Vivekananda’

The TNSRO in Pudukkottai is all set to organize special lecture programme at its own premises on January 12 as part of Swami Vivekananda Jayanti celebrations in the national theme of ***Sankalp Se Siddhi***. National Youth Festival is also organised annually and includes cultural activities that are both competitive and non-competitive in nature in Pudukkottai. In this programme totally 55 youth and women participants were actively participated. So, the National Youth Day is started celebrating every year to encourage and inspire the honorable youths of the India. Schools and colleges are delightfully adorned to enthusiastically celebrated the event. In this event the following activities are conducted: Speeches, recitations, presentations, competitions, sporting events and other performances.

### 10.9.Village Biodiversity School



Biodiversity conservation is critical for economic development and poverty alleviation. Around 70% of the global poor live in rural areas where as much as



50% to 90% of livelihoods are sourced from non-marketed goods and ecosystem services. The agriculture sector is highly dependent on the services generated by biodiversity and neighboring natural ecosystems that provide key services such as pollination, pest control, genetic diversity, soil retention, structure and fertility, water supply, etc. Although there is certainly an increased adoption of good agricultural practices, there are still abundant unsustainable practices in agriculture that cause substantial environmental degradation, biodiversity loss and a progressive loss of agricultural productivity at the same time. Village Biodiversity School concept is our own idea. It is to promote the information about biodiversity importance through the committee of the local community. 5 School programmes are conducted by us. RET plant species were distributed and conserved by the rural community. Awareness training also conducted. Rural people and youth were actively participated in this programme.

### 10.10.Free Plant Distribution Programme



TNSRO has conducted its free tree sapling distribution programme on 22 May 2018, World Biodiversity Day at Pudukkottai TNSRO premises by organizing an awareness session-cum-plant distribution ceremony with Roland Foundation. The awareness session held on the occasion was chaired by S.Vijikumar, Director of TNSRO elaborated the objective of the meet. Mr.A.Arangan in his speech dwelt at length on the objective of urged the people to save the environment. The programme was also graced by the presence of NGO officials, students and Public. Various tree saplings are distributed and planted house hold area and cultivation land for its conservation.

### 10.11.Observation of National Days.



TNSRO has organized some of important National Days such as Independence Day, Republic Day, World Sparrow Day, World Health Day and Earth Day. The days observed by various activities like speech, drawing and essay, quiz etc. at Pudukkottai. Prizes were distributed to winners.

## 10.12. Bose Science Society –Science Promotion programme

TNSRO has established a science society for science popularization and technology development and other science promotional activities. The society was affiliated with VIPNET science club, Vigyan Prasar, Govt. of India, New Delhi. Now the society formed two wings 1. Student membership 2. Faculty wing. 2017-2018 period the society was totally enrolled 154 members. In this period totally 499 members registered in our society. Also the society is instituted various awards for research scholars, students, faculties and scientists. We organized 8<sup>th</sup> National Conference on Natural Sciences with award presentation ceremony at Pudukkottai on 15.9.2018. Various science disciplines faculties and scientists honored and have been received award, certificates for their service and research activities.



## 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- Bonsecurs College for women, Thanjavur, Holy cross college, Trichy.
- Environmental Awareness – Peace Trust/RRA/MoEF/Dindigul
- NGO partner – Roland foundation, RDO, Pudukkottai.

### 11.1.MoU signing Institutions

1.TNSRO has signed MOU with Tharshal Training Academy Pvt.Ltd.,Chennai on 21.5.2018 at Chennai for collaborating work in NEET/JEE Entrance Exam Training Services by the product of [Achieversnest.com](http://Achieversnest.com)

2.Memorandum of Understanding is signed on 5th July 2018 at Pudukkottai between Director, TNSRO and Principal, VV College of Engineering, V.V.Nagar, Tisaiyanvilai(Via), Tirunelveli(Dist.) for collaborating research and development in the field of engineering sector .

3. TNSRO has signed MoU with Vivekanandha College of Arts and Science for Women,Elayampalayam,Tiruchengode,Namakkal Dist.,TN on 5.9.2018 at College premises for collaborating research and educational work in the field of botany and other science disciplines.



### 11.Awards and Appreciation for Environmental Education and Awareness



In 2013 our organization has received best institution award (**Ariger 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.

### 12.Future Plans and Activities

- Biodiversity conservation –flora and fauna diversity Endangered species 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

### 13. Available Facilities

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

### 14. Our Auditor

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

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#### **Report presented by**

**S.Vijikumar**

**Director/Managing Trustee**

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