



- IRTC Project Implimentation Unit
- Parishad Production Centre Gramakala Samata



Annual Report 2018 - 2019



IRTC

INTEGRATED RURAL TECHNOLOGY CENTRE

A Grant-in-Aid institution of KSCSTE Govt. of Kerala, Supported by : DST, Govt. of India

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ANNUAL REPORT 2018-19

Integrated Rural Technology Centre

Mundur, Palakkad, Kerala-678592

IRTC'S MISSION

To adapt technologies known elsewhere into forms which will be readily acceptable to the Society.

To diffuse innovative practices and technologies and to develop a scientific culture among the masses.

To work out local level development plans

To take new technologies out of our R&D institutions for field trials

To identify and promote local inventiveness.

To develop integrated S&T packages and management models for strengthening local economies.

To promote human resources and skill development

To develop innovative methods and technologies in education and mass communication.

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DIRECTOR'S REPORT

I am privileged to present this annual report of activities and achievements of IRTC during the year 2018-19. IRTC, the brain child of Kerala Sasthra Sahitya Parishad, has completed 31 years of existence as a unique research and development institution with its major thrust on sustainable development of rural and marginalised populace. Technologies were developed and adapted to solve specific local issues. Core research programs of the Centre are always formulated and approved only after discussion in the Research Advisory Committee and Executive Committee as also with other experts in the field. During the reporting period, the Centre handled 19 externally funded projects, 4 consultancy projects and 7 other research projects. The divisions of Solid Waste Management, Natural Resource Management, Social Science, Energy and Pottery have carried out number of programmes giving priority to community interest.

Being a grant-in-aid institution of Kerala State Council for Science, Technology and Environment, IRTC receives core grant from the government. The Centre also received funding from various other agencies for its projects. The Centre of Excellence in Solid Waste Management received non plan fund for its various activities. Funds were received from LSGIs for DPR and Master Plan preparations for designated watersheds of various LSGs. The project on post flood assessment of biodiversity is being supported by Kerala State Biodiver-

sity Board. Projects for school children was supported by SCERT, foldscope project by DBT, project on value added products from fruits by KSCSTE, performance of tribal residential schools in Kerala by State Planning Board, impact of KILA training programs by KILA and mushroom cultivation by BIRD, KSCSTE. A new project has been sanctioned by Ministry of Science Technology for the establishment of BIOTECH KISAN hub at our centre.

Feasibility studies were also carried out for small hydel project of Vellachattappara, Alannallur Gramapanchayath and Ecotourism and boating project of Vellinezhi Gramapanchayath. Terracotta relief work at Divisional Office Palakkad for Indian Railways was completed.

The Centre has taken up consultancy service for district panchayath in the generation of hydroelectric power. The Fisheries Department had entrusted the Centre with training and capacity building of 'Theeramaythri' members in livelihood improvement. We are continuing as consultants for waste management of Kozhikode Medical College and Kozhikode Airport.

Haritha Keralam Mission approved IRTC as its Haritha Sahaya Sthapanam to coordinate its program in 151 panchayaths, 17 municipalities and 1 corporation. The Centre has happily shouldered the responsibility but is constrained by fund crunch; the salary of staff has not yet been received.

Research has been led by an alternative paradigm of learning and innovation.

It actually involves all aspects of the innovation chain i.e., adaptation of technology and development of scientific ideas and translating that idea into a commercial proposition and extension of technology both to the market and rural communities. Inoculum preparation and commercial production by solid waste management division is a good example in this regard.

WADI model of tribal development fund programme is a holistic approach addressing horticulture development, production, processing and marketing value added produce. Four years have been completed since the implementation of this scheme under NABARD. 70,000 agroforestry and horticultural trees have been planted as part of this programme in 401 tribal families in 8 hamlets of Puthur Gramapanchayath in Attapady; the trees have started yielding. As a Resource Support Organisation of NAB-ARD, IRTC has made remarkableachievement in the executionofthe project. Sustainable development programme is being implemented in 22 watersheds of Palakkad district.

Social Science division has undertaken an ambitious programme for career enhancement of tribal youth in Attappady. Impact assessment of KILA training programmes for localbody officials and child friendly local governance programme have been carried out. Study on the impact of 2018 floods on the biodiversity in Attappady was also carried out during this year. Assessment of the efficiency of tribal residential schools in Kerala, pre schooling system in Kerala, were also carried out by the division during this period.

We could effectively utilise the infrastructure facilities of the campus for

conducting a series of training programs during the reporting period. These include 20 day long training programme on biogas plant production for Jeevika workers under DRDR Rohtas district of Bihar with the support of DRDA, Sasram, 4 day Agri entrepreneur training with the assistance of MAN-AGE (Hyderabad), 9 day training for CREST and 2 day research methodology workshop funded by KSCSTE. Series of training was offered in subjects related to Panchayath level planning for Family Health Centre and team building for Panchayath officials. A 6 day workshop was held for volunteers of Kudumbasree on Waste Management and water harvesting technologies.

Besides the training programs, World Environment Day and Wetland Day were celebrated by conducting awareness classes and arranging competitions for school and college students.

As resource persons, our faculty have attended several seminars/ workshops and were also actively engaged in science popularisation programmes. A few papers have been published in seminar proceedings and journals. Young researchers have presented their papers in Kerala Science Congress and Indian Science Congress.

Foldscope, the use of the ultraaffordable paper microscope was popularised among school children. IRTC has joined hands in this mission to bring tools to communities that often do not have the means to engage in scientific exploration. This project has succeeded in creating curiosity and excitement in young minds.

Many new project proposals were presented before the Executive Committee meeting and RAC and reworked on the basis of recommendation of these bodies and sent for approval from appropriate funding agencies.

Projects in different disciplines related to nutrition assessment, empowerment of tribal youth in career development, site specific studies and mitigation measures in land slide areas, design and fabrication of gratifiers for safer disposal of sanitary napkins of bed ridden patients, celebration of international year of the Periodic table, BiotechKISAN, Spring watershed development, key resource centre for training and capacity building in waste management have been submitted to various funding agencies for approval.

Efforts were made to establish formal collaboration with leading academic institutions. MOUs were signed with Government Engineering College, Kannur and Karunya University, Coimbatore.

Ninety one postgraduate/B.Tech students joined the institute for their project/internship during this year. Students from different academic institutions have successfully undergone internship as part of their course work.

A hand book on solid waste management was published by IRTC and a reference book on Solid Waste Management was published by KSSP on behalf of IRTC. A few publications have come out in referred journals too. The monograph on solid waste management is ready and is in the final stage of editing.

IRTC activities are published through its newsletter and website. Newsletter is published on a trimonthly basis.

Project Implementation Unit (PIU) and Parishad Production Centre (PPC) which are sister concerns of IRTC registered quantum leap in the number of projects for implementation, creation of additional

infrastructure and improvement of infrastructure facility. Samatha Village and Khadi emporium are new initiatives started by PPC. The Rural Engineering Centre (REC) has been modernised.

We are looking forward towards setting up a centre of Geo informatics, an Educational Research Centre and also adapting technology for liquid waste treatment in individual households.

Though efforts have taken to find more full time senior personnel to lead R D activities, expected success could not be brought in this regard. This attempt is to be rejuvenated with the support of all the members of General Body.

This year, we have conducted training programs on research methodology and electronics apart from the solid waste management and watershed development. The response was very encouraging from the receiving end and scope for conducting such programs is very high in future. Geo informatics laboratory is to be strengthened with more software computer facilities. The strengthening of the laboratory will be helpful in conducting training, taking up consultancy work and research project.

In view of extended multifarious activities, facilities at jubilee campus need to be upgraded. One more residential block to accommodate 40 to 50 is needed. The effort to seek financial support from government is being continued.

Major funded projects run by the institution, particularly under NABARD is linked to sustainable agriculture. The activities of various units should be converged under a single umbrella so as to conceptualise and implement sustainable development models.

Setting up of an educational research unit giving thrust to develop enjoyable teaching and learning practices is under consideration.

A major project under consideration is to evolve a model for holistic development of a panchayath integrating components such as waste management, watershed development, agriculture development, energy conservation, education, health and carbon footprint is under consideration. Discussion at different levels have already been completed and hope the project will be materialised this year.

There were some administrative changes in IRTC during the reported year. Dr. S . Sreekumar has taken the charge of Director and Dr. M . Balagopal has joined

as Director of Research. The Designation of Research Coordinator has restated as Director of Research since September 2018. Prof. B.M Musthafa who was serving the role of Research Coordinator has taken the charge of Head of Energy Division of IRTC.

The success of IRTC, besides facilities, is drawn by technical, administrative and project staff. The Centre has plans to develop a synergetic network with other academic and scientific institutions both in India and abroad.

Five executive committee meetings and two General Body meetings were held during the reporting year.

I am sure that the team spirit in IRTC can take the Centre to greater heights in future.

Dr. S. Sreekumar Director

FINANCIAL REPORT

The main source of income of IRTC continued to be the same as figured in the financial statements of the previous year, i.e, income from projects, training, grant-in-aid and consultancy. Due to some major changes in the accounting procedure followed in the previous years, necessitated by new G.S.T provisions, the figures shown in the Income and Expenditure Statement represent total receipts from different sources.

The statement shows an income of Rs.321.25 lakhs compared to an amount of Rs.137.53 lakhs of the previous year, is a reflection of this procedural change. The actual excess of income over expenditure is Rs.3,17,546 with no substantial difference from the figures of the previous year (3,58,100). The total receipts for the financial year is 498.40 Lakhs. Apart from the expenditure coming under the major income heads mentioned above, the highest item of expenditure is Administrative overheads which comes to Rs.62.44 Lakhs.

Regarding revenue, training and accommodation charges are the main source of own income. IRTC is moving towards optimum utilisation of infrastructure and training capacity of it's various divisions to generate a steady income. In the coming years, the major challenge is a gradual shift to sustainable income sources emerging out of capability and expertise of IRTC.

It is observed that, this year we got only Rs.8.33 Lakhs out of a plan grant assistance provision of Rs.50 Lakhs, against our proposals approved, weakened our financial position & Liquidity to a certain extent. Steps are being taken to overcome this situation.

The detailed financial statements are presented in this report for approval, audited by M/S Ranjith Karthikeyan Associates, Chartered Accountants and internal Auditors Prof. K.Balagopal and K.V.Sabu.

Major Sources of Income	(INR)
Project Income	93 05 170
Training Income	83 07 550
Annual Maintenance & Consultancy	34 57 546
Grant in aid received (Rs.25 Lakhs balance of previous year)	83 33 000
General & Administrative Income	14 37 232



1.1 GRANT-IN-AID SUPPORT

1.1.1 GRANT-IN-AID SUPPORT TO SCIENCE & TECHNOLOGY INSTITUTIONS (PLAN SCHEME)

Grant Amount : INR 8.33 lakhs

Funding Agency : KSCSTE, Govt.of Kerala

IRTC has carried out the Research and Development activities during the period 2018-19 under the state plan scheme as follows.

Research & Development Activities a) Green Technology

- Solar Power (Thermal System): Fabrication testing and fine tuning of solar photo voltaic system
- Conducted Faculty Trainings on Green Technology: Biogas installation and installation of green waste management devices.
- Installation of Automatic Weather Station.

b) Waste to Wealth

- InoculumProduct Development in the field of composting.
- Studied shelf life of developed inoculum.
- Developed waste water treatment system.
- Study carried out on quality of the compost and identifying the presence of heavy metal in compost.
- R & D carried out for effective treatment system to treat effluent slurry from latrine linked biogas plant.

 Procured equipment for R&D work in Spectrophotometer, UV treatment units, Chemical, Glass wares, Membrane filters, Compost and soil sieves, Test kit etc.

c) Agriculture Packaging to Small Holdings & Promotion of Agriculture Enterprises.

- R & D work carried out in optimizing and stabilizing Re-circulatory Aquaculture System (RAS) Established an agricultural nursery and modern facilities undertook model agricultural activities in selected land holdings.
- Production, standardisation and testing effectiveness of light weight terracotta porous balls.
- Plant bed preparation and polyhouse
- R & D work conducted in Mushroom spawn production farming testing quality analysis.
- Developed a new variety of Mushroom, ie "Pink Mushroom" with low water and high fibre content, in addition to high vitamin content.
- Geo spatial mapping for land use pattern upgraded to 24 thematic layer interpretation and mapping.
- Study carried out on collected



GIS data and analysis, mapping of landslide prone areas.

Study conducted on riverbase in watersheds with GIS support and preparation of GIS based watershed development plan.

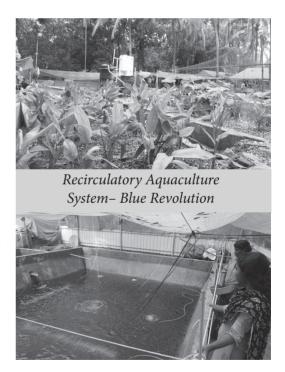
Infrastructure Development

Maintenance of environment lab & creating additional facilities for R&D work.

- Installation of Automatic Weather Station
- Installation of 2KW SPV panel and power supply accessories
- Procured equipment for R & D works such as UV treatment units, chemical glassware, visible spectrophotometer, compost and soil sieves, testing kits etc.
- Created facilities including instruments for documentation and production of videos
- Procured Aerators, Sensors for RAS
 Units for water quality surveillance,
 Developed testing units and feed production
- Construction Pond with electrical and plumbing accessories. Installation of UPS, Solar panels. Plant bed preparation work also completed.
- Infrastructure development created

in mushroom spawn lab: Fabrication and accessories, lab maintenance and monitoring.

 Procured Geospatial equipment's such as GPS 12H, GPS ETREX, DGPS etc.



1.1.2 CENTRE OF EXCELLENCE IN WASTE MANAGEMENT (ADDITIONAL GRANT-IN-AID, NON PLAN SCHEME)

Grant Amount : INR 50 lakhs

Funding Agency : KSCSTE, Govt. of Kerala

The grant-in-aid (non plan) support helped IRTC in a big way to establish infrastructure for conducting Research and Development activities in solid as well as liquid waste management under the project 'Establishing Centre of Excellence in Waste management (CEWM)'. This has further led to the consolidation of related activities and their state wide extension. Demonstration and trainings as well as dissemination and transfer of technology are being done now with better vigour and vitality than ever before. IRTC enjoys the status of an accredited agency of Government of Kerala in the field of solid waste management and its service delivery to LSGs continues through the Project Implementation Unit extending state of the art technologies.

In continuation of the activities during the period of 2016-17 & 2017-18, establishing a Centre of Excellence in Solid waste management under the Non Plan Grant scheme of Govt. Kerala, the following activities were undertaken during the reporting year 2018-19.

Liquid waste Treatment Systems

Moving Bed Biofilm Reactor Technology (MBBR) was incorporated in the already existing grey water treatment unit under activated sludge process.

Additional fittings were incorporated to help concurrentmonitoring of the process efficiency by assessing

microbial types and load, sedimentation rates, BOD and COD loads, C/N and water qualities at different stages of treatment.



Moving Bed Biofilm Reactor Technology (MBBR)

Faecal Sludge Management Systems (FSMS)

Customized domestic models of kitchen waste, food waste and vegetable waste fed biogas units that can be attached to toilet or septic tanks, are being promoted by IRTC. Nevertheless, its acceptability is far from satisfactory. Efforts were taken under the project to enhance the hygienic



standards of the toilet linked biogas systems both domestic and community models promoted by IRTC by incorporating extra treatment facilities for the overflow water from the faecal sludge digester tank. A demonstration plant of toilet linked biogas plant is installed and experimented well in IRTC Campus.

A prototype of a bioreactor was designed, and fermentation conditions optimised in IRTC bioenergy yard to illustrate that the pathogen content and BOD load of faecal sludge can be reduced to safe level in a multipurpose biodigester system which can replace septic tank or leach pits. However, the desludging from such a biodigester also might cause problems which need to be investigated further through studies.

Inoculum Production and Research Unit (IPRU)

Two research projects implemented in IRTC with the financial support from KSCSTE paved the way for establishing the IPRU under this grantprogramme. Two composting inoculums have so far passed all such acid tests and are being used in large scale compost production units run by the IRTC/PIU combined management system statewide. Baciplus 1 is concentrated inoculum and is recommended for the composting of Chicken waste as well as fibre rich plant and vegetable wastes. Baciplus 2 is recommended for easily degradable vegetable and fruit wastes. Thermophilic fungus inoculum is under investigation and will be put to test shortly. The capacity of production of Baciplus 1 &2 inoculums in IRTC microbiology Lab

is 10 Litres per day which is enough for treating 2 to 4 tonnes per day of organic wastes depending on their nature.

Mechanization in Compost Yard and MRF

The machinery introduced in MRF are plastic shredder and plastic extruder. The investment made in IRTC yard is mainly to familiarise trainees particularly on the limitations of such machines, specifications of blades in such machines to suit thickness and strength of various plastic products and the inevitability of prewashing, drying and sorting plastic wastes and ewastes into appropriate categories before channelizing them to recycling industries.

Income generating components of in-house units of waste treatment

On an average 10 to 15 tonnes of quality compost are produced annually in IRTC compost yard.

From the bioenergy installations the average yield is 15 to 20 M3 biogas per day. This corresponds to about 4500 M3 to 5000 M3 biogas annually and can replace 140 to 150 LPG gas cylinders of 14.2 kg weight. Part of the biogas is used for lighting purpose also.

Externally Funded projects & in-house research activities in the CEWM

Studies on oil degrading bacteria isolated from the oil separator in the grey water treatment plant in IRTC campus are in progress. DNA analysis for species identification of the bacteria isolate and HPLC analysis for oil residue estimation are underway.

Studies on solid state pre treatment of raw coir pith to overcome the water pollution issues associated with the existing practice of water washing is ongoing. The study involves estimation of tannic acid and lignin before and after fungus treatment besides the C/N ratio, water holding capacity estimation and compatibility studies using composting microbes.

Dissertation/Internship/ doctoral studies of students

Students from various Universities in Kerala and Tamil Nadu have been utilizing the facilities in CEWM for dissertation, internship and docotal studies.

Transfer and dissemination of waste processing technologies from CEWM

CEWM is functioning as a hub for waste-to-wealth bio manure production units functioning at Local Bodies such as Kunnamkulam, Guruvayur, Chittur, Mundur, and Puthupariyaram where the IRTC inoculum based treatment and use of coir pith in the composting processes are being done scientifically to produce nutrient rich bio manure.

Bio waste to biogas plants in the Government Medical College campus, Thiruvananthapuram are functioning under the hub supervision of CEWM. CEWM has been providing technical knowhow through IRTC/PIU combined management system to prepare DPR for solid and liquid waste management.

Trainings

The facilities currently available in the CEWM that are established through grant-in-aid project has made it a utility hub for conducting practical trainings and learning-by-doing assignments.

The Local Self Government Department issued an order GO. (General) No. 832/2017/LSGD dated 23.03.2017 based on which elected members and officials from local bodies attended 3 days training during the report year also in batches of 40 participants.

The KILA has been utilizing the facilities available the CEWM for imparting practical training to Municipal representatives, Secretaries and officials.

A group of 20 women who are members of JEEVIKA, an organization like Kudumbashree functioning in Rohtas district of Bihar, attended 24 days (from 16.12.2018 to 08.01.2019) training for learning the techniques of fabrication, charging, operation and maintenance of 2 m3 biogas plants. The CEWM has been providing activity based orientation training to Harith Karma Sena coordinators to fulfil the responsibility of IRTC as Haritha Sahaya Sthapanam. It has also given training to state level and district level co ordinators.

Consultancy

offered The division has consultancy to various Institutions such as Pondicherry Universiity, Kottayam and Thrissur Medical Colleges. It has also provided support to LSGIs to prepare DPR on waste management for Kothmangalam Palakkad Municipalities and and Panchavath Karumkulam Grama in Thiruvananthapuram. In addition this it has provided consultancy support to Puthiyappa Fishing harbour Kozhikkode.

1.2 EXTERNALLY FUNDED PROJECTS

1.2.1 VALUE ADDED PRODUCTS FROM JACKFRUIT, MANGO AND PAPAYA, THEIR VALIDATION AND DISSEMINATION (UNDER RURAL TECHNOLOGY PROGRAME OF KSCSTE)

Principal Investigator : M.M. Sreekumar (Retd.) NIIST

Co-Investigator : Dr. M. Lalithambika

Project Outlay : INR 3 lakhs

Project Team : Ajay R., Prameela G.

OBJECTIVES OF THE PROGRAM

- Preparation of jack fruit based biscuits, cakes and toffee, dried ripe mango and papaya tuttifrutti
- 2. To estimate Calcium, Phosphorus and fibre content of jack fruit at various stages of its growth.
- To compare the glycemic index of jack fruit and starch powder and their comparative evaluation.

COFFEE BOAD SITUED STANDERS OF VIOLATIONAL TRAINING COODSMANUS FOR THE HALL WORK AND THE PRODUCTS FORM AMILA VENUE INTO MUNICUR DATE 2303-2913 Trainees from Wayanad

TRAINING IN AMLA PROCESSING SPONSORED BY COFFEE BOARD OF INDIA

The techniques involved a) cleaning the seeds b) Deseeding c) Keeping in sugar solution (60° Brix), at 50-55° C for 3 hours followed by drying in an electric drier at 65° C for 6 hours.



Dr. S. Sreekumar, Director, IRTC inaugurating the program

OFF-SEASON (JACKFRUIT) ACTIVITIES

From November 2018 to February 2019, the jackfruit availability was not there as it is a seasonal fruit. During this period as indicated in the project processing of Papaya and Amla has been extensively done at IRTC.

PROCESSING OF AMLA

40 kg of Amla procured from Attappady, Palakkad has been processed by using the osmotic dehydration techniques (sugar concentration of the syrup is 60 brix).

1.2.2 A PILOT STUDY ON THE EFFECTIVENESS OF BACILLUS SP ENRICHED EM SOLUTION AS A PARTIAL SUBSTITUTE FOR FRESH COW DUNG, IN THE INSTALLATION AND STABILIZATION OF FLOATING DOME DOMESTIC BIOGAS PLANT

Principal Investigator : V. R. Raghunandanan

Co Investigator : Susmitha .V Project Outlay : INR 3.5 lakh

Funding Agency : KSCSTE, Thiruvananthapuram

For the installation of biogas plants, a new protocol is prescribed, based on the findings of this study, an inoculum was developed which can be applied at a specific dose in order to replace 3/4th of the quantity of fresh cow dung at present being used for the installation of biogas plants. The reason for retaining 1/4th of the cow dung is to ensure the optimum availability of the methane generating bacterial consortium, both non-spore forming and spore forming, present in the fresh dung. Methanogens are strictly anaerobic and hence preparation of their inoculum on a commercial scale has not been successful. Therefore fresh cow

dung cannot be fully replaced. The bacterial inoculum introduced through this study is to boost hydrolytic enzyme activities during the initial hydrolytic retention period. Inoculum in liters, both cow dung and homogenized vegetable waste in kg, in the ratio 1:9:9 are recommended.

The benefit of the EM technology can be extended to the livelihood unit at community level. As an application to this, a 0.5 m3 biogas plant was installed at Puthupariyaram with EM as substitute to cow dung. Final project report was submitted to KSCSTE on the month of September 2018.



Experiment on biogas with EM Solution & EM preparation



Biogas Experimental Yard

1.2.3 FOLDSCOPE PROJECT: PARTICIPATORY MICROBIAL COUNT ASSESSMENT AND WATER CONSERVATION TRAINING IN MALAMPUZHA BLOCK, PALAKKAD, KERALA AND WATER QUALITY PROFILING

Principal Investigator : Prof. B. M. Musthafa
Co- Investigator : Surya Sethumadhavan
Project Assistants : Renila R, Silpa P
Project Outlay : INR 8 lakhs

Funding Agency : Dept. of Bio Technology, Govt. of India

The department of Biotechnology, under Ministry of Science and Technology, Govt. of India sanctioned a project "Towards disbursent of microgrant for implementation of projects under the Foldscope scheme". Duration of the project is 1 year. Main objective of the project is to assess microbial count and PH of water and to perform GIS enabled profiling of drinking water in puduppariyaram panchayath in Malampuzha Block by using and popularization of Foldscope (a paper microscope).

FIELD STUDY - KERALASSERY

An awareness programme conducted regarding the microworld in drinking water by checking the presence of planktons in the water sample using foldscope. The programme was coordinated by the Kerala Sastra Sahitya Parishad (KSSP) activists of Keralassery Panchayath as part of "The complete health village programme". It was conducted as a fist step of the programme to make the public aware about the presence of microorganisms in their drinking water sources.

PUDUSSERY & AKATHETHARA

One of the parameters of water quality is measured in terms of microbial content; Foldscope can intervene in the field of plankton analysis. As part of this, Water samples were collected from nearby ponds and the observed objects were documented as photos and videos. The chlorinated and non chlorinated water samples were collected from Pudussery and Akathethara Grama Panchayaths immediately after the 2018 flood.

The samples collected as per the pre-planning (i.e. preparations like Plankton net, Sterilized bottles, rope, Specification labels). Samples were collected and the presence of live planktons was observed under the foldscope.



Viewing microbes through Foldscope

PUDUPPARIYARAM

The research team visited the flood affected areas in Puthuppariyaram Gram Panchayath after consultation with key leaders of Panchayath and collected water samples from different locations. The water samples were observed under Foldscope and the microorganisms especially planktons present in the samples were shown to public. The panchayath took remedial action on the basis of the report.

WORKSHOP

35 one day workshops were conducted in various schools, colleges and IRTC Campus for students and Teachers. About 1248 students and 77 teachers actively participated in the workshops which covered usage of Foldscope, demonstration, and awareness classes on drinking water quality.

IRTC and Kerala Sasthra Sahithya Parishad (KSSP), Palakkad jointly organized two day workshop on "Assembly and usage of Foldscope" which was coordinated by DBT's Foldscope project team of IRTC. The workshop was held at IRTC on 4th and 5th of April, 2019 for the UP and HS students from various regions of Palakkad. A total of 71 students participated in the workshop.

As part of Ozone Day and National Science Day Celebrations, training programmes were organized for students from various schools and colleges.

Four students have successfully completed their internship and project activities related to foldscope.

1.2.4 ROLE OF MODEL RESIDENTIAL SCHOOLS IN THE EDUCATIONAL ATTAINMENT OF TRIBAL STUDENTS: AN ANALYSIS OF PERFORMANCE OF TRIBAL RESIDENTIAL SCHOOLS IN KERALA

Principal Investigator : Dr. K. Rajesh

Project Coordinators : Shihabudeen Paikam, Nisha P

Project Outlay : INR 9,79,000/

Sponsored by : Kerala State Planning Board

It is a research programme funded by Kerala State Planning Board to assess the quality of Model residential school for Scheduled tribes in Kerala and their role in enhancing the educational attainment of tribal children. This study was 10 month short term impact assessment conducted by a 5 member research team which is coordinated by Shihabudeen Paikam and Nisha. P. The main objectives of the study are to evaluate the functioning and

performance of TRSs and to suggest reforms to improve the performance of TRSs.

To develop a comprehensive understanding about the status and functioning of the tribal residential schools in the state, a combination of qualitative and quantitative methods is being adopted in the methodology of the study. Quantitative methods are being used to collect data on school infrastructure and academic performance of the students. Qualitative

methods are adopted to capture the various aspects of management of the schools, postschooling experiences of students, and schoolcommunity relationship.

The study team collected basic information about the 20 Model Residential Schools under tribal department of Kerala government, by using a checklist which includes information regarding academic, non academic, infrastructure, curricular and cocurricular activities. After the administration of general checklist in all

schools, further study has been limited to ten cases all over the state. As a part of data collection, the research team conducted 25 focus group discussions among students of 9th and 11th standard students and alumni of MRS, 120 in-depth interviews among MRS staffs and checklist administration in all schools was done. The interim report was submitted to Planning Board as a part of the field work termination. The study is in the report finalization stage.

1.2.5 COMPARATIVE STUDY ON PRE-SCHOOLING IN KERALA

Principal Investigator : Krishna S. Nair Project Outlay : INR 2 lakh

Funding Agency : SCERT, Thiruvananthapuram

A study on the different preschooling systems being practiced in Kerala was undertaken with financial support from the State Council for Educational Research and Training (SCERT).

The pilot phase of the project was done in Thiruvananthapuram district. The report of the study has been finalized and submitted to SCERT Thiruvananthapuram.



Presentation at SCERT



Meetings with students and parents

1.2.6 IMPACT ANALYSIS OF KILA TRAINING PROGRAMMES a. CHILD FRIENDLY LOCAL GOVERNANCE (CFLG)

Principal Investigator : Dr. K. Rajesh
Project Coordinator : Arjun Prasad
Project Outlay : INR 20,48,244/Funding Agency : KILA, Thrissur

Kerala Institute of Local Administration (KILA) has accorded a short term impact assessment of their training on establishing Child Friendly Local Governance in selected LSGIs (140 panchayats and 6 municipalities) of Kerala.

The study followed a mixed methods approach and the hired personnel were provided training via a 2 day internal workshop. Workshops for interim review, data entry and analysis, and report preparation were also conducted. More than 40 local self government institutions across the state were selected for the studies. Impact

assessment was carried out by comparing the effectiveness of Child Friendly local governance environment at KILA trained LSGIs and others. The studies used case control design and employed a number of tools including interviews, checklists, and focus group discussion. Elected representatives, officials, implementation officers, civil society representatives, KILA extension faculty, and children from each LSG institution were the main respondents for the study. The studies are in the report finalization phase after submission of draft report.

b. CAPACITY BUILDING OF MUNICIPAL OFFICIALS

Principal Investigator : Dr. K Rajesh.
Project Coordinator : Smitha P. R.
Project Outlay : INR 12,65,550/-

Funding Agency : Kerala Institute of Local Administration

Kerala Institute of Local Administration (KILA) entrusted IRTC with an impact assessment study of KILA training programme on Capacity Building for Urban Local Body officials. The main objective of this five month short term study was to conduct impact assessment of the training programme organized by KILA for Capacity Building of Municipal officials to provide suggestions on possible improvement and modifications. The 6

member research team was coordinated by Ms Smitha and guided by Dr. K. Rajesh (Senior fellow and head of Social Science division).

The study has followed largely on the quantitative method of data collection, including a checklist and questionnaire and has also intensively relied on both published and unpublished documents from the Municipalities and Corporations. Field visit to

randomly selected Municipalities and Corporations have been undertaken and the questionnaire has been administered to 151 selected officials as per the sample. A checklist was administered for collecting information about the status of performance of ULBs. Interview schedule was administrated among 151 participants for getting feedback about

the training and questionnaire had been used at the end of the study to assess the level of knowledge gain of participants in the domains of training.

The report was submitted within a period of five months which involved three sections initial preparation, field work, and report writing and submission.

1.2.7 ASSESSING IMPACT OF FLOODS / LANDSLIDES ON BIODIVERSITY IN ATTAPPADY

Principal investigator : Dr. K.K. Seethalakshmi

Co-investigator : Chinchu C. Project Outlay : INR 2,37,600/-

Funding Agency : Kerala State Biodiversity Board

Integrated Rural Technology Centre was assigned with a short term project which is sponsored by Kerala State Biodiversity Board for the assessment of impact of floods/ landslides on Biodiversity, Bio resources and Tribal livelihood in Attappady.

The study addressed the impact of floods/landslides on the biodiversity, bio resources, and tribal livelihood in Attappady and the impact on traditional food crops like tubers, millets and pulses to be assessed. The main objective of the programme was to propose strategies and action plans to restore tribal livelihood and conserve bio resources.

On a primary assessment of the impact of recent floods in Attappady, it was found that considerable damage has occurred for crops both annual and perennial. Among the plantation crops, Nutmeg and arecanut were most affected. All the annual crops like

maize, raggi, ground nuts were washed away. Remaining crops like maize was completely dried due to the sand deposit. The tuber crops like tapioca, sweet potato also indicated a low yield. Another severe problem affecting tuber crops was attack of wild pigs. Baseline data which can be available from early documentations like biodiversity register was not complete for tribal settlements. The main source of information was traditional knowledge of the elderly people. A detailed study is planned in the inundation area of river Bhavani which covers tribal settlements and the area affected by landslides and soil piping with the participation of stakeholders.

Study of the soil chemistry of areas flooded by the river Bhavani and landslide locations was also conducted. The programme is terminated officially and retained for further follow up.

1.2.8 TRAINING PROGRAMME FOR ENHANCING THE EMPLOYABILITY OF EDUCATED TRIBAL YOUTH OF ATTAPPADI

Project Coordinator : Anju B.

Project Outlay : INR 7,65,600/-Funding Agency : ITDP, Attappady

This project is part of a three stage programme for empowering the educated tribal youth of Attappadi through peer supported training. The training will enable the beneficiaries to prepare for important competitive exams and also to improve their personality for better adjustment with the circumstances of the mainstream society, the first phase training provided to 60 educated youth selected from the three Gram Panchayats of Attappadi. The sessions were conducted on weekends and holidays. One hundred and twenty hours of training is imparted

to the beneficiaries within this time period. The first phase coverd 60 youth selected from the tribal families.

The academic curriculum for this training has two components. Specific portions related to the syllabi for the targeted examinations and confidence-building components incorporated with a weightage given to the examspecific content. Monthly monitoring has been done by a committee constituted with the local selfgovernment officials, experts from IRTC and officials of the Tribal Development Department.

1.2.9 IMPLEMENTATION OF INTEGRATED TRIBAL DEVELOPMENT FUND PROGRAMME IN PUDUR GRAMAPANCHAYATH, ATTAPPADY

Funding Agency : NABARD

Project Outlay : INR 232.481 lakhs

Project Coordinator : R. Satheesh

NABARD has sanctioned the Tribal Development Project with IRTC as the Project Implimenting Agency (PIA) in 2015. With the financial assistance of NABARD providing various horticulture crops such as coconut, mango, arcanut, sappota, teak, mahagony, silveroak to 401 tribal households with 1acre landholding in various hamlets like Anakkal, Veettiyur, Cheerakkadavu, Bommiyampady,

Dhanyam, Kalpetty, manjikandi, paloor is the major objective of the TDFWADI Project.

 As part of the project, 91,813 saplings of coconut, mango, arecanut, sappota, cashew nut, mahogany, silveroak and pepper wines were distributed to 352 farmers, out of which 68,181 saplings survived.

- The farmers have started getting yield from various crops such as mango and sappota.
- Soil conservation techniques such as trenches, mud bunds, rain pits were completed in the WADI lands.
- Bio Fertilizers such as cow dung and compost were distributed among farmers.
- As part of the kitchen garden programme, 300 beneficiaries were given seedlings of vegetables, biofertilizers and fertilizer kits.
 Vegetable cultivation was also done along with this.
- Thirty five beneficiaries were given with 2 goats each, as part of the livelihood programme. All goats were insured under the scheme.
- Two day leadership training programme was provided for



TDF supported nursery



NABARD officials' visit

production and marketing of value added products.

- Marayur 'Chilla' market was visited in order to study and understand the functioning of marketing system.
- A marketing group 'Aaranya' was formed and various marketing activities were initiated with the other marketing groups. Two units were started in Veetiyoor and Kalpetty for bio fertilizer production. Training programme was conducted for compost production.
- Started the activities for "Ashwagandha" farming with the collaboration of Sumindhar India organic limited
- Fifty tribal farmers from Kannur and Kasaragod have visited TDF Project Area

1.2.10 INTEGRATED TRIBAL DEVELOPMENT FUND PROGRAMME FOR THE HAMLETS OF CHALIYAR AND URANGATTIRI GRAMA PANCHAYATHS IN MALAPPURAM DISTRICT

Project Coordinator : R. Satheesh
DPR Cost : INR 60,000/-

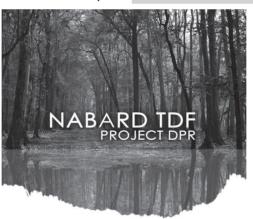
NABARD entrusted IRTC to prepare a detailed Project Report of TDF programe for Chaliyar and Urangattiri Grama panchayaths in Malappuram district. IRTC started the DPR preparation work in October 2018. Beneficiary survey, PRA and discussion with Grama panchayath and concerned officials and LSGD representatives were conducted. After survey aided by GIS tools, detailed project report was prepared and submitted to NABARD for approval.

Total 17 hamlets with 403 households are the beneficiaries of the project - 8 hamlets from chaliyar

and 9 hamlets from Urangattiri Gramapanchayath. Duration of the project will be 5 years.



DPR Survey at Tribal hamlets



Chaliyar-Urangattiri Gramapanchayats Malappuram District

PIA
Integrated Rural Technology Centre

1.2.11 SUSTAINABLE DEVELOPMENT PLAN

Funding Agency : NABARD Project Outlay : INR 4.7 lakhs

Project Team : R. Satheesh, I.A. Chakko, Smt. Sophy K. Antony

IRTC is a Resource Support Organisation for the sustainable development plan in 22 NHWDP watersheds of Palakkad District. This is a 2 years programe initiated by NABARD to assure the sustainability of watersheds by supporting technical as well as financial areas. During the reporting period the following activities were undertaken:

Special project for increasing Vegetable Production in Watersheds

Increasing vegetable production is an important activity implemented in Watersheds by the Village Watershed Committees. Under this project, farmers who had undertaken vegetable cultivation for their livelihood are identified and provided with soft loans with minimum interest decided by the VWC. The amount is used as a revolving fund. Report of the activities of various Watersheds is given below.



Vegetable Cultivation by Smt. Saly in Ettadithode Watershed

Chullimada and Ettadithodu watersheds

Chullimada and Ettadithodu watersheds are situated in Puthusseri Grama Panchayath of Palakkad District where vegetable cultivation is a major activity. Ten thousand rupees each were provided to three farmers who had undertaken vegetable cultivation.



Organic Vegetable

These vegetable cultivation fields are an inspiration to the other farmers. They are marketing the products in public markets and also in the markets organized by Agriculture Department. It is interesting to note that all the work in the field is carried out by the family members and they need to be specially congratulated for this. Only organic cultivation was done here.

The sustainable development programme has been implemented in 22 watersheds of Palakkad district such as Chazhiyattiri, Pazhaniyar Palayam, Chullimada, Chalavara, Nenmara, Chinnamoolathara, Ettadithodu etc

The following skill development /Entreprenurship development programmes for women were organised

Punjappadom	Soap manufacturing and tailoring	
Kannankundu	Paper Bag & Cloth Bag Manufacturing	
Chalavara	Paper Bag & Cloth Bag Manufacturing	
Pullundassery	Tailoring and Embroidery	
Ponnankallithode	Tailoring and Embroidery	
Ettadithode	Tailoring and Embroidery	
Kuppandivara	Tailoring and Embroidery	

Exposure visits organised by Village Watershed Committee (VWC)

- 1. KLDB Mattupetty (Indo-Swiss Project)
- 2. Centre for Tuber Crops Research Station (CTCRI, TVM)
- 3. BMFC (TVM)
- 4. Kuriyattumala Farm (KLM)
- 5. Agri. Research Station (Anakkayam)
- 6. Regional Agricultural Research Station (Ambalavayal)
- 7. VFPCK Market (Vattavada)
- 8. Brahmagiri Development Society (Wayanad)
- Unique Innovative Activities
- Fish Farming
- Establishment of Service centre and Skilled Development Training Centre



VWC offices functioning as Service Centres

1.2.12 ESTABLISHMENT OF BIOTECH KISAN HUB

Funding Agency : Dept. of Bio Technology,

Ministry of Science and Technology Govt. of India

Project Cost : INR 58.48 lakhs

Duration : 2 years

Project Team : Prof. B.M. Musthafa (Hub facilitator)

Deependra Sadasivan (Project Coordinator)

Department of Biotechnology under Ministry of Science and Technology Govt. of India sancioned a project "Establishment of BIOTECH KISAN Hub at IRTC under Biotech KISAN scheme during the reported year. Duriation of the project is 2 years. The project was sanctioned in 2019 March.

• To under take 250 demonstration units as rapid composting of crop residue biomass in home stead farming by installing compost pits .

Objectives of the project

• To demonstrate recycling of Biowaste to composting at homestead level.

Expected outcomes of the project

- Reducing cost of fertiliser for farmers
- Promote sustainable orgnic farming



2. PREPARATION OF DETAILED PROJECT REPORTS

WATERSEHED & OTHER PROJECTS



2.1 WATERSHED MASTER PLAN PROJECTS

Project Team : Sri R. Satheesh, Dr. K. Rajesh, M. Rajan,

Praveen K.V., Ismail, Dhanoop Mohan, Shibu P, Ajina Kannath, Nikhil K.V, Rahul Sibin K, Hari Prasad, Pranav S, Abilash J,

Rakendu, Vivek., C.P.Sasi

IRTC is an accredited agency of Govt. of Kerala for preparing watershed master plan and a number of local bodies had approached IRTC. So far IRTC has prepared watershed development plans

for more than 200 grama panchayaths in Kerala. During the year IRTC has engaged in preparing watershed based master plans for the following local bodies.

Sl.NO	Name of LSGD	DPR Cost	Status
1	Punnayoor GP	6.19	Report Submitted
2	Mangalam GP	4.51	Report Submitted
3	Thirunnavaya GP	5.21	Report Submitted
4	Triprangode GP	4.11	Report Submitted
5	Kadappuram GP	3.33	Report Submitted
6	Melatoor GP	6.33	On going
7	Kozhikode GP	12.19	On going
8	Karumkulam GP	8.00	Report Submitted
9	Karuvarakundu GP	9.03	On going



Training for Volunteers in Masterplan Preparation

2.2 "TIRUR PONNANI PUZHA SAMRAKSHANAM" INTEGRATED WATERSHED MASTER PLAN PROJECT

Funding Agency : District Panchayath, Malappuram

Project Outlay : INR 15.35 lakhs Project Co-ordinators : Sri R. Satheesh Dr. Rajesh K

The Tirur Ponnani river conservation project is a massive project implemented in the Panchayaths of Vettom, Thalakkad, Cheriyamundam, Purathur, Mangalam, and Thriprangode based on the watershed of Tirur Ponnani river of Malappuram district. Delineating the project area into micro watersheds, identifying soil and water conservation, agricultural and tourism potential in that areas were the major components.



In 2018 the electrical conductivity and coliform bacteria population of water was found to be greater than the permissible level, which is quite high as compared to 2012 indicating high pollution. The urge for conservation of this important water resource and increased death rate of fishes were major reasons for proposing this project by Malappuram District Panchayath.

Project Objectives

- Take steps to protect and rehabilitate all natural and manmade water resources.
- This project envisages to stop the dumping of solid and liquid wastes to the river and improve the water quality.
- Perform necessary measures to store rainwater to the maximum ext ent and release it into the soil.
- Identifying tourism opportunities in the area and bringing a positive change in the attitude of the people towards the river.
- Prepare detailed action plan for the collection and processing of biodegradable and nonbiodegradable wastes in markets, schools, public institutions and homes.
- Increase the social interaction in the coastal area through the cultural interventions such as libraries.



PRA Training for volunteers

IRTC could propose projects with estimated out lay of Rs 140 crores for the activities such as natural resource management and conservation through public and private interventions.

2.3 FEASIBILITY STUDY OF SMALL HYDEL PROJECT VELLACHATTAPPARA, ALANALLUR GRAMAPANCHAYATH

Project Cost : INR 50,000/-

Funding Agency : Alanallur Gramapanchayath

Project Coordinators : Sri Radha Gopi

Prof. B.M. Musthafa

Vellachattappara is located in Alanallur gramapanchayath. The waterfall is located in vellachattapara Stream which is begining at a elvation of 470 m. After the stream joins the pulayamthodu which flow to velliaar that finally draws to kunthipuzha.

An expert team visited the location and collected necessary datas from various sources. Study report was prepared and draft submitted to the Gramapanchayath.



2.4 FEASIBILITY STUDY OF ECO TOURISM & BOATING AT VELLINEZHI GRAMAPANCHAYATH

Project Cost : INR 50,000/-

Funding Agency : Vellinezhi Gramapanchayath

Vellinezhi gramapanchayath entrusted IRTC to prepare feasibility study report for Muthalamoorkhan Kadavu in the bank of Kunthipuzha (Karimpuzha) river. IRTC has prepared a report after the flood due to heavy rainfall in Kerala during period. The project area also drowned due to overflow of Karimpuzha River. Considering the flood in the rainy

season, some changes have been made in the feasibility report. IRTC has sought the technical expertise of tourism consultants.



2.5 DETAILED PROJECT REPORT ON SOLID WASTE MANAGEMENT UNDER SWACHH BHARAT (URBAN)

Project Coordinators : Rahul.R, Nikhil Sudheesh, Praveen K.V

Duration of the Project : 3 Months

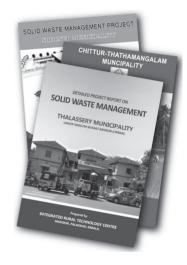
IRTC prepared detailed project report on Solid Waste Management for Thalasseri, Shornur and Chittur Muncipalities under Swatch Bharat Mission (Urban) Programme of Govt. of India. Suchitwa Mission empanelled IRTC as the agency to prepare DPR on solid waste management for the above municipalities.

a) THALASSERY MUNICIPALITY Approved DPR cost: INR 5.14 crs DPR Consultation Fees: INR 3,72,754/

b) SHORNUR MUNICIPALITY
Approved DPR cost: INR 2.99 crs
DPR Consultation Fees: INR 1,89,523/

c) CHITTUR MUNICIPALITY
Approved DPR cost: INR 2.12 crs
DPR Consultation Fees: INR 1.23,140/

The DPR prepared with three level waste management system, ie. household, institutional and community levels. IRTC has also proposed a resource recovery facility, swap shop, repair shop and recycling industries at Municipal level.



2.6 SOLID WASTE MANAGEMENT RANNI PAZHAVANGADI GRAMA PANCHAYATH, PATHANAMTHITTA

Project Team : Nikhil Sudheesh, Praveen .K.V, and Kiran.S

Project Cost : INR 2,71,400/-

Status : Draft Report Submitted

Ranni Pazhavangadi Grama panchayath entrusted IRTC to prepare detailed project report on Solid Waste Management of the panchayath.

Some expert visits and discussions and meetings also to be conducted to complete the preparation of project report. The draft report was submitted to the panchayath for necessary discussion.



Ranni market



Excerpts from Field Visit



3. CONSULTANCY PROJECTS



3.1 PALAKKUZHY SMALL HYDEL PROJECT

Funded by : Palakkad Small Hydro Company Ltd.

under District Panchayath, Palakkad

Consulatancy Fee : 4% of the Project Cost

Project Coordinators : Radhagopi. E.P., M. Venugopal,

Prof. B. M. Musthafa

Civil works started on 2nd January 2018 with a startup meeting at weir site presided by President, Jilla Panchayath. There was some delay in the tendering process due to some technical issues. Power house site excavation is going on. It will take another 2 / 3 months to complete the earth excavation and rock blasting. Weir site rock blasting is almost completed. The leveling course of



Thendillam water falls

concrete will be started within 2 months. LPP route earth excavation and rock blasting completed. The forest land required for Penstock pipe laying is not transferred by Forest department.

3.2 THEERAMYTHRI PROJECT

Sponsored by : Society for Assistance to Fisherwomen

(SAF), Dept. of Fisheries, Govt. of Kerala

Consultancy Amount : INR 16 Lakhs Project Coordinator : Amal Mohan

Project Consultants : A. K. Mathew, Ruchi Prasad

IRTC, as consultant to the programme, has been providing continuous support to SAF in programme implementation, over last eight years. IRTC's intervention points, as per the Terms of Reference (ToR) given in the Memorandum of Understanding (MoU) for the support, have been the following.

 To provide field level coordination, implementation, and monitoring support



Dry fish activity group

- To conduct and assist in conducting training programmes
- Liaison with other departments and **LSGs**
- To assist in performance improvement of the project
- provide institutional business development support to federations

IRTC's contributions include support to SAF at three levels state, district and activity group. Broadly, the contributions are classified under the following.

- Programme Planning and Implementation
- Training and Capacity Building
- Supportto Federations
- Business Promotion and Marketing Support
- Performance Improvement
- Support to New Initiatives

Programme Planning & Implementation

The micro enterprises under the Theeramythri Project recorded atotal sales turnover of about Rs. 73.74 crore during the financial year 2018-19. IRTC team has been actively supporting the units and the federation in attaining this sales volume.

IRTC have been actively participating in the state level monthly review meetings, district level weekly meetings and Theeramythri Management Council(TMC) meeting at LSG levels and have been guiding and supporting SAF in planning and implementation of annual and monthly plans.

from participating **Apart** meetings, IRTC have been supporting SAF by extensive and regular field visit and thus ensuring the strict monitoring of the project. In the year 2018-19, 345 new microenterprise units were started in 10 districts. IRTC visited 160 new units and did the asset verification to ensure proper fund utilization of the project. Anomalies were found as a part of asset verification and were reported and rectified in a timely manner.



Super market run by fisher women

Support to Apex Federation

The major activities undertaken by IRTC for supporting Federation include the following.

- Project preparation for starting Textile Showroom for garments category federation, implementation and support.
- Project preparation for launching Theeramythri brand Dry Fish Product, Setting up the warehouse, identifying and capacity building for the units from which the products are to be procure.
- Procurement of cloth material and distribution among the groups.
- Accounts Related Support
- Apex Federation was given the responsibility to take over

and manage Theeramaveli Supermarket at Valappu, Ernakulam. IRTC team coordinated the entire operations to revive the supermarket.

Training and Capacity Building

In the year 2018-19, IRTC has conducted some major training programmes for SAF. They are mentioned below

- Training for C Grade Units (Lowperforming microenterprise units)
- Training for District Mission Coordinators and Office Assistants
- Orientation Programme for new enterprise units
- Accounts Training in 8 districts.

The Road Ahead

IRTC have been supporting the SAF in the implementation of Theeramythri programme in which the primary activity have been to develop micro enterprises. Over the last eight years nearly 1500 micro enterprise units have been set up under the project. The number of micro enterprise units in the coastal area has reached a saturation level and there are fewer opportunities for developing new micro enterprises. Hence more focus should be given to interventions among fish vending women, women involved in peeling, curing and drying of fish, whose concerns are yet to be addressed. For continuing the support to existing micro enterprise units, it is imperative to strengthen the federation and make it selfsustainable. Cluster based approach should be adopted to increase livelihood income of coastal fisherwomen through resource conservation.

3.3 ANNUAL MAINTENANCE OF BIOMETHANATION PLANT AND STP FOR CISF BARRACK AT CALICUT INTERNATIONAL AIRPORT

Consultant Engineer : Sri.C.V.Sudheendran

Plant Operation : Sri. Subash.P Consultancy Fee : INR 2,45,000/-

IRTC has undertaken the operation and maintenance activity of Biomethanation plant and Sewage Treatment Plant for CISF Barrack at Calicut International Airport, Karipur Calicut from 2015 onwards.

The agreement made between Calicut International Airport and IRTC was for 3 years. It was successfully completed during the reporting year

and the agreement period ended on 31st March 2019.



3.4 ANNUAL MAINTENANCE AND OPERATION OF BIOGAS PLANT AT GOVT. MEDICAL COLLEGE, KOZHIKODE

Project Consultant Engineer : Sri. C. V. Sudheendran

Plant Operation & Maintenance : Sri.V. K. Nazir Consultancy Fee : INR14,25,000/

IRTC had taken up the Solid Waste treatment of Kozhikode Medical College by constructing 6 Biogas plants at Medical College premises in 2014. In continuation to this work medical college has entrusted IRTC to operate and maintain the following biogas plants. The tenure of the contract completed in March 2019.

- a) Biogas Plant at Super speciality Hospital Block 1.5 Ton Capacity
- b) Biogas Plant at Nurses Hostel 2 Ton Capacity
- c) Biogas Plant at Indian Coffee House premises 1.5 Ton Capacity
- d) Biogas Plant at P.G Hostel Premises 1.5 Ton Capacity
- e) Biogas Plant at Medical College IMCH1 2 Ton Capacity
- f) Biogas Plant at Chest Hospital 0.5 Ton Capacity



4. MAJOR TRAININGS



4.1 BIOGAS TRAINING FOR DRDA ROHTAS, BIHAR

Sponsor : District Rural Development Agency (DRDA)

Rohtas, Bihar

Programme Coordinator: Prof. B.M. Musthafa

Twenty days Training and hand holding support on domestic Biogas plant production for DRDA Rohtas, Bihar started at Integrated Rural Technology Centre, Mundur, Palakkad, Kerala on 16th December 2018 and ended on 6th Jan. 2019. The program was conducted for Jeevika members in Rohtas. 20 delegates came from DRDA, Rohtas, Bihar.



Plant Visit

4.2 TRAINING FOR RURAL ENTERPRISES FOR ESTABLISHED AGRIPRENURES

Sponsored by : National Institute of Agricultural

Extension Management (MANAGE),

Hyderabad

Training Coordinator : I.A. Chakko Project Cost : INR 1,76,000/-

Duration : 4 days

Four day refresher training programme on Rural Enterprises for established Agriprenures Under Agri Clinics and Agri Business (AC & ABC) of MANAGE. 35 Participants attended the training programme.

Mushroom Cultivation,
Ornamental Fish Farming, Rural
livelihood technology, Agroforestry,
Experience of Farmer Producer
Companies etc. are the various sessions
ofthe programme.



Inauguration

4.3 ARDRAM FHC TEAM BUILDING TRAINING - KILA

State Health System Resource Centre Kerala announced the training for transforming 503 selected PHC into Family Health Centre in the financial year 2018-19. Different Key players of the Local Self government as well as the FHC team are the trainees of the programme.

SHRC Kerala is collaboration with KILA has organised the programe. IRTC was the agency to facilitate and coordinate the training programe.

The training was provided to 4056 persons compraising of 17 batches. Representatives from LSGIs an PHCs were the participants of the training.

SHRC Kerala Director, Dr. Shinu K.S., Ardram Mission Director, Dr. Jameela Balan and other officials form department of Health and KILA are attended to facilitate the training. Smt. K.K. Shailaja (Hounrable Minister of Social Welfare and Health Govt. of Kerala) addressed the training programme.



Hon. Minister K. K. Shailaja inaugurating the programme

Participants

4.4 BIOGAS INSTALLATION TRAINING AT PONDICHERRY UNIVERSITY

Biogas installation training programme was held at Pondichery University campus by Solid Waste Management Division of IRTC. As part of the programme, two biogas plants were installed in the campus

This was one of the technolgy transfer activities done by IRTC by

given hands on training to the students an teachers of Pondicherry University. Prof. V. R. Raghunandhanan, headed the training class. Ratheesh P. R., Technical Assistant gave hands on training to the trainees.



5. WORKSHOPS / SEMINARS / CONFERENCES



5.1 WORLD ENVIRONMENT DAY CELEBRATION

Title of the Programme : Threat due to plastic debris in aquatic systems

Sponsored by : KSCSTE, Thiruvananthapuram

Sanctioned amount : INR 15,000

Programme Coordinator: Ms. Aiswarya P. V.

World Environment Day was celebrated at Mundur IRTC on 7th and 8th June 2018. Various activities such as planting saplings and discussion on environmental issues were held as part of our celebration. Prof. V. R. Ragunandanan (Rtd. Chemistry Professor. Kerala Agricultural University) inaugurated the two day celebration. Sixty teacher students from Calicut University Teacher Education Centre (CUTEC), Koduvayoor were the participants in the celebrations.



Audience to Prof.B.M.Musthafa's class

Mr P. K. Narayanan, Registrar, IRTC delivered the key note address in the function and he inspired the students to work collectively for the protection of earth and emphasised on the need to build a greener world. He also mentioned about the role of IRTC for the same. Aiswarya P. V., Engineer IRTC delivered the welcome speech and Mr.Rahul R, Engineer IRTC presided over the function. Mrs Padmaja, Teacher CUTEC Koduvayoor and Mr. Jai



Mr. P. K. Narayanan, Registrar, IRTC delivering key note address

Somanath, Training coordinator of IRTC occupied the dais during the function.

Prof. V.R. Raghunandanan engaged in the first session as the topic 'Plastic Waste Management' in continuatin to the session Ms. Mariya Mithu Francis delivered a classes Solid Waste Management. IRTC campus visit also organised as part of the programe.

Second day session started with an interactive session with Prof. B. M. Musthafa on the topic. Threat due to plastic debris in aquatic systems. Mr. Indrajith, Electrical Engineer, IRTC, Sri Jaisomanathan, Training coordinator, Smt. Padmaja, Teacher CUTE, Koduvayur, Ms. Aiswarya Civil Engineer IRTC also participated and delivered speech in the programme.

5.2 WORLD WETLAND DAY 2018

Sponsored by : KSCSTE, Thiruvananthapuram

Sanctioned Amount : INR 20,000/-Programe coordinator : Swathi .M

IRTC celebrated World Wetland day with two day workshop "Climate change The Role of Wetlands" on 2019 February 8 and 9 in Collaboration with Thunchath Ezhuthachan Malayalam University (TEMU) and Haritha Keralam Mission. Director of IRTC Dr.S. Sreekumar has inaugurated the Wetland day Celebration.



Presentation by Dr. S. Sreekumar



Participants

Sreekumar Dr. (Vanishing Wetlands) Radhakrishnan (Wetland Ecosystem Management and Policies) Dr. Vasudevan Pillai (Wetlands Water harvesting and Preservation) Sri.Lalithan Management Strategies (Waste Villages to keep Clean Wetlands), Dr. K.K. Seethalakshmi (Climate resilient agriculture), Sri. Ramaprasanth(Climate Resilient Aquaculture) and Prof.B.M. Musthafa (For Wetlands: Green Protocol and Green Business) were the resource persons of the seminar.

5.3 RESEARCH METHODOLOGY WORKSHOP

Sponsored by : KSCSTE, Thiruvananthapuram

Sanctioned Amount : INR 40,000/-

Programe coordinator : Prof. B.M. Musthafa

The two day workshop on Research Methodology: Writing Practices, Language, and Soft Skills was conducted with the financial assistance from Women Scientists Division of Kerala State Council for Science, Technology, and Environment (KSCSTE), sanctioned vide order No 746/2018/KSCSTE dated 05.12.2018. The objective of theworkshopwas to improve the participating researchers' technical

skills, research skills and soft skills and to enhance effective communication. From the 123 applicants, 52 were attended the workshop.

In the two day workshop following topics were delivered in two day sessions.

- Philosophy Science
- Methods and Methodologies of Science research
- Science Communication
- Hand on session a scientific writing
- Languages and writing skills for researchers
- Guidelines for publishing and patenting
- How to become a good researcher



Participants



Session by Dr. Sunitha Sreenivas

The above mentioned topics were handled by Dr. C. George Thomas Associate Dean of KAU, Dr. N. Shaji Principal (Rtd.) Govt. College Manimalakunnu, Dr. S. Sreekumar, Director IRTC, Dr. Sunitha, Professor and HOD PG Dept. of English Govt. College Mokeri, Dr.V.Premachandran, Senior Fellow Solar Energy Research Institute, and Dr.M.Balagopalan, Rtd. chief. Scientist, KFRI.

Majority of participants appreciated the workshop sessions and were interested in attending future programmes covering similar or more advanced topics.

5.4 NATIONAL SCIENCE DAY 2019 CELEBRATIONS

Focal Theme : Communicating Science for all Sponsored by : KSCSTE, Thiruvananthapuram

Sanctioned Amount : INR 10,000/-Programe Coordinator : Ms. Silpa .P

A five day programme was organized from 21st to 28th February 2019. The programme title was "An attempt to magnify your curiosity". This programme provided a platform for students and the public to establish

a new educational and research tool, Foldscope (a paper microscope). The five days programme was conducted in various schools and Puduppariyaram Panchayath in Palakkad district. Around 500 students, more than 30 teachers and the public participated in the celebrations. The students and Teachers showed active interest and enthusiasm in the Foldscope and display items.

As part of this Foldscope demonstration, assembling, use and scope of Foldscope programmes were conducted among following schools of Palakkad District. HSS Keralasseri, HSS. Parali, GVHSS Pathiripala, GHS



Students viewing microbes through Foldscope



Inauguration of National Science Day celebrations

Mankara, GVHSS Karakurussi, G.HSS Pollassri, GUPS Karimba, GHSS Karimba, BEMHSS Palakkad, GHS Vennakara, KCPS Kavasseri, HS Puliyaparambu, GVHSS Nenmara.

Ms.Silpa and Ms.Renila, project assistants, IRTC conducted regular classes and demonstration in schools. Prof. B.M. Musthafa coordinated the programe.



6. IRTC DIVISIONS



6.1 IRTC PROJECT IMPLEMENTATION UNIT (IRTC-PIU)

Secretary: A.K. Mathew

IRTC established the Project **Implement** (IRTC-PIU) ation Unit in 2016 as its arm for taking up solid waste management projects of Local Self Governments and completing them within time limits ensuring quality and accountability. IRTC-PIU then works with the LSG to devise a strategy and develop a solution, in the process formulating an actionable plan.

It is this involvement in problem responding to a request, conducting early discussions, devising developing strategies, projects, implementing them for LSGs that renders IRTC-PIU a unique position in the sector. Since its inception, IRTC-PIU has been able to develop around 300 contracts with LSGs across the State.

IRTC-PIU works with LSGs on these projects through the established government process with the LSGs providing administrative sanction to the project and Suchitwa Mission or the Engineering Departments of according technical sanction. Site engineers of IRTC-PIU do the management of projects in the field through direct supervision and reporting. IRTC-PIU works with 12 service providers for implementation of these projects. In addition to LSGs, IRTC-PIU also provides support to public institutions.

This report reviews IRTC-PIU's activities for the financial year 2018-19.

Management and Human Resources

IRTC-PIU has a General Body and Executive Committee consisting of experts with decades of expertise in solid waste management, scientists, eminent personalities, representatives and the Kerala Sastra Sahitya Parishad. The General Body met once and the Executive Committee met thrice during the financial year for guiding and monitoring IRTC-PIU's activities. At the institutional level, IRTC Core Committee monitors PIU's activities. IRTC-PIU's Secretary attends the Core Committee meetings and reports its activities. During 2018-19, the Secretary of IRTC-PIU attended all the six Core Committee meetings held at IRTC.

There have been a few changes at the leadership during the reporting year. K.K. Janardhanan took over as Chairman of PIU in early July 2018. New members of the Executive Committee include Dr. S. Sreekumar, Director, IRTC, and Shri. T.P. Srisankar, Director, Parishad Production Centre (PPC), IRTC. The Executive Committee appointed Shri. A.K. Mathew as Secretary of IRTC-PIU on 14th August 2018, following the deputation of the former Secretary Shri. I.A. Chacko to the Watershed Division. IRTC-PIU's Annual General Body Meeting held on 20th December 2018 took cognisance of these changes.

Members of Executive Committee, IRTC-PIU

1. K.K. Janardhanan - Chairman - (Registrar, IRTC)
2. Dr. S. Sreekumar - Director, IRTC

3. A.K. Mathew
 4. T.P. Srisankar
 5. P. V. Joseph
 Secretary, PIU
 Director, PPC
 Secretary, PPC

6. Prof. B. M. Musthafa - Member 7. Prof. V. R. Raghunandanan - Member 8. Prof. P. K. Raveendran - Member 9. T.K. Meerabhai - Member

10. V. G. Gopinathan - Special Invitee
11. V. Manoj Kumar - Special Invitee
12. T. Lalithan - Internal Auditor

In addition to the eleven core staff members, there are 32 persons engaged as workers in administering Annual Maintenance Contracts (AMCs) of solid wastemanagementprojectsinGovernment Medical College, Thiruvananthapuram, Guruvayur Municipality, Kunnamkulam Municipality, and Eramala Grama Panchayat. District Level Coordinators look after project implementation in their respective districts.

Activities during 2018-19

Projects	Agreement signed	Projects Work Started	Completed Works/Projects (Including Spillover Projects)
a) Engineering Projects		46	57
1. Windrow Composting Unit	3		
2. Aerobic Composting Unit	46		
3. Biogas Plant	11		
4. Well Recharge, RWHS	19		
5. Biopark	3		
6. AMC project	5		
b) Non Engineering Projects		75	60
1. Portable Biogas plants	41		
2. Biobin	22		
3. Ring Compost	1		
4. Other Projects	18		
Total	169	121	117

Major Ongoing Projects

The following are some of the major ongoing projects, which have been under implementation during the reporting year:

	0 1 07				
Sl.No.	Institution	Project			
1	Medical College, Thrissur	Windrow composting unit, Material Collection Facility (MCF)			
2	District Panchayat, Palakkad	Biogas plant, Well recharging for schools, Drainage renovation at District Hospital			
3	Nenmara Grama Panchayat	Windrow composting unit			
4	Kalpetta Municipality	Windrow composting unit			
5	Permbavoor Municipality	Waste management project			
6	Taluk Hospital, Parassala	Total Waste management project and Bio Park			

Important Project Proposals Submitted during 2018-19

Proposals were submitted for waste management and related projects during the reporting year to the following institutions:

- Government Medical College, Kottayam
- Harbour Engineering Department, Department of Fisheries, Kozhikode
- Malabar Botanical Garden, Kozhikode
- Sree Sankaracharya University, Kalady
- Pattamby Municipality
- Kozhikode Corporation

Ongoing Projects in Maintenance Support

IRTC-PIU has ongoing projects Annual Maintenance Contracts (AMCs) for Government Medical Thiruvananthapuram, College, Guruvayoor Municipality, Kunnamkulam Municipality, and Eramala Grama Panchayath.

Sewage Treatment and Bio-Mining

Sewage treatment and Bio mining have been the two new areas of IRTC-PIU in this year. While sewage treatment is about safe handling and disposal of human waste, bio mining is the technique of extraction and segregation of plastics and useful materials from the heap of wastes dumped for a period.

IRTChastakenseveralinnovative approaches to sewage management. Its solid waste management team visited Brahmapuram Sewage Treatment Plant (STP) and studied the systems and processes. Subsequently, steps have been made to STP projects for LSGs; meetings were organised with service providers for identifying suitable partners. With reference to that, an agreement was signed between IRTC and Water Care, an institution at Thrissur to undertake STP projects.

Muscat Projects and Environmental Services, Thiruvananthapuram has expressed

interest to cooperate with IRTC in STP projects. In this context, a meeting was held between the Muscat Projects and the SWM division of IRTC. IRTC is working with the agency to prepare detailed project report for STP for Karinkulam Grama Panchayath in Thiruvananthapuram district.

A pilot project in biomining has been ongoing at Kollangod Grama Panchayat. M/s Farm Chemicals and Equipment, Thrissur is implementing this project in cooperation with GDEPL, Pune. They had expressed their interest to work with PIU within Kerala and outside. As a Haritha Sahaya Sthapanam, relationship with these institutions is expected to help IRTC in devising methods and processes for handling plastic waste and inert waste.

Financial Overview

This financial year, PIU had signed contracts worth Rs. 9.54 crore in engineering projects and Rs 5.76 crore in nonengineering projects (totalling Rs 15.6 crore). However, PIU's transactions were limited to Rs 8.7 crore. This includes Rs. 3.26 crores through engineering projects and Rs 4.92 crores through nonengineering projects. The net profit of PIU in this financial year is Rs 6.64 lakhs as against the last year's Rs. 20.57 lakhs.

The expected income has not been received from the LSGs, and differences have been found in the final bills of several works. Delay in auditing, lack of clarity in calculating the Goods and Services Tax (GST), and income tax deducted atsource during 201718 resulted in additional payment in the current fiscal year. An amount of Rs 1.66 lakh has been paid as interest alone.

An amount of Rs.4.4 lakh has been spent as promotional expenses. This reporting year PIU gave special attention to recording and filing of income tax and GST. In December 2018, Department of LSG increased the subsidy rate of household waste management devices. This led to several LSGs withdrawing from the existing contracts with IRTC to avail the additional subsidies. This led to a significant fall of Rs. 2 crore in non-engineering projects. At the same time, the expected rise in receipts on engineering projects failed to materialise on account of inadequate payment by LSGs. These have been the reasons for the income to fall below that of the previous years, while there has not been any reduction in the expenses.

6.2 SOCIAL SCIENCE DIVISION

Division Head : Dr. Rajesh K. Associate Fellow : Chinchu C.

Project Assistants : Anju B, Nikhil Sudheesh

Social Science Division started its formal operation in February 2014, and has been engaged in research and academic support activities. The division has been continuing with its own projects and assisting other departments of IRTC as well. The division provides internship and project support to Post Graduate students of social work and other social science streams. Training and workshops to institutions are also provided in areas such as research methodology, **Participatory** Rural Appraisal (PRA), field work etc.

Monographs of IRTC

The executive committee of IRTC had decided to prepare monographs covering the work of IRTC in the areas including Waste management Watershed development. Paid interns were appointed for the preparatory works They met most of the stakeholders and experts in each field and conducted detailed document analysis and field visits within three months and submitted draft reports. The monographs would serve the purpose of authentic documents narrating the contributions of IRTC in the above mentioned areas since its inception. After a round of editing, these monographs are in the layout stage. ISBN numbers have been allotted for publishing the monographs.

Enhancing Employability of Educated Tribal Youth in Attappady

The project entitled Training programme for Enhancing the Employability of Educated Tribal Youth in Attappady was started in 2018. A total of 60 beneficiaries were selected from the lists provided from ITDP with the help of a screening module. Ms. Anju Bhargavan is coordinating the academic aspects of the project.

Assessment of Tribal Residential Schools

The research project titled "Role of Model Residential Schools in the Educational Attaintment of Tribal Students: An Analysis of performance of Tribal Residential Schools in Kerala" funded by Kerala State Planning Board aims to evaluate the functioning and performance and to suggest reforms to improve the performance of TRS. Study is in progress.

KILA Training Impact Assessment

Kerala Institute of Local Administration (KILA) has awarded to short term studies of four months each, for assessing the impact of training provided for two programmes – Child Friendly Local Governance (CFLG) and Capacity Building Programme for Municipal officials. Duration of the project was completed in the reported

year. But require some more lives to complete its evaluation process.

Pre-Schooling Systems in Kerala

A study on the different preschooling systems being practiced in Kerala was undertaken with financial support from the State Council for Educational Research and Training (SCERT). The pilot phase of the project was done in Thiruvananthapuram district. Ms. Krishna S. Nair was in charge of the study. The report of the study has been finalized.

Impact of Floods on Biodiversity and Tribal Livelihood

A study on the impact of 2018 floods on biodiversity and tribal livelihood in Attappady funded by Kerala State Biodiversity Board was taken up in collaboration with other divisions. Field survey was done along with scientific studies on soil degradation. The study is in the report submission stage.

Collaborative initiatives with Other Divisions

- i) Waste Management DPR Preparation: The division assisted the Detailed **Project** Report (DPR) preparation for Ranni-Pazhavangadi Gram Panchayat. Personnel from the division were involved in field visits, tool development, data collection, and other activities.
- ii) WADI DPR Preparation: The division has provided assistance for the preparation of Detailed Project Report (DPR) for the

implementation of the WADI tribal development programme of NABARD in Nilambur of Malappuram district.

Research Studies by Interns:

- i) Menstrual Taboos Among Women: A study on the menstrual taboos existing among rural women was conducted in Kodumbu Gram Panchayath of Palakkad by two interns from the Tata Institute of Social Sciences (TISS). The survey found out a number of facts regarding menstrual taboos among different generations of women.
- ii) Mushroom Cultivation As Livelihood Activity: A study on the utility of mushroom cultivation as a livelihood activity was conducted among mushroom cultivators who are beneficiaries of IRTC's training and services. The study was carried out by MSW interns and the draft report has been submitted. This study is envisaged to provide scientific inputs to strengthen IRTC's involvement as a livelihood support organization.
- Iii) Environmental Changes in Wetlands: A study on environmental changes in wetland areas of Pudusseri Gram Panchayath was taken up as dissertation by Chithra R, an intern. The study report has been submitted.
- iv) Performance of Kudumbashree Women Enterprises: Another internship dissertation was carried out on the performance

of women enterprises working under the Kudumbashree poverty eradication mission. The study covered enterprises working in the Akathethara Gram Panchayath of Palakkad district. The report has been submitted.

Other Activities

The division has adopted a novel approach that student interns can be admitted either for attaching to ongoing projects, or to conduct field research and studies. More than 15 Post Graduate students in Social Work and other Social Science disciplines were provided with internship/project guidance by the division. Research Scholars from various institutions have also received support from the division. Some of the student projects were done as independent studies, as partof an effortto produce a comprehensive frame of research outcomes with future applicability and social significance.

6.3 SOLID WASTE MANAGEMENT DIVISION

Division Head : Prof. V.R. Raghunandanan
Project Assistants : Susmitha V, Fathima Nashwa,
Rahul R, Mariya Midhu Francis

Liquid waste management initiatives

The waste management division has expanded its technical expertise to liquid waste management also. As a first step waste management division has identified a service provider who has agreed to work with IRTC - PIU for preparing and implementing projects in waste water management. Accordingly SWM has given scientific guidance and support for preparing DPR for waste water treatment in the fish harbour at Kozhikode. SWM has also been instrumental in establishing MBBR technology based waste water treatment system in IRTC campus. This is expected to strengthen the training facilities in liquid waste management.

Trainings

As per GO 832/2017 OF LSGD three day training on waste management was offered to Officials. About 130 trainees from 31 Panchayaths in 3 batches attended the training during the second phase from August to November 2018.

Training in technology options for waste management is being offered from waste management division in association with KILA. The target groups belong to four separate categories-Municipal chairpersons and health SC chairpersons, Municipal secretaries, Housing Associations and Haritha Karma coordinators. Demonstration classes on the microbiology of both composting and biomethanation making use of compound microscope

and foldscope are the specialities. Hand holding training in the segregation of plastic waste for recycling is another useful training component. Training at IRTCmanaged modern compost plant, Kunnamkulam is also part of the training schedule offered from IRTC for KILA.

Service provided to PIU and Haritha Sahaya Sthapanam

The waste management division has been providing scientific guidance and consultancy to both PIU and Harithasahayasthapanam for preparing DPR in themanagement of degradable and non degradable wastes. During the report period DPR for waste management in Palakkad municipality, Kothamangalam municipality, Kottayam medical college and Thrissur medical college were prepared accordingly.

Production and supply of EM solution for composting:

IRTC started the supply of Effective microbial solution for accelerated composting to Samata Green Municipality waste management plant at Kunnamkulam from 2/7/18 till the date. A total of 695 litres of Effective microbial solution was supplied last academic year. As a modification for enhancing activity, the inoculum is being sprayed on the waste during shredding followed by raw coir pith application instead of using inoculum enriched coir pith.

IN-HOUSE PROJECTS

a) To Isolate and Identify an Effective Fungus for Acelerating Aerobic Composting An experiment was designed for the isolation, identification and conformation of the activity, dosage and mode of application of effective thermophile fungus which is to be used as lignocellulolytic inoculum in the early phase of composting. effective funguses isolated from fresh cow dung and tested the competency with Bacillus sp. The fungus doesn't produce any inhibitory effect against Bacillus sp so both are work in single media. Its dose determination and species identification need to be done. Its shelf life will be ascertained shortly and it needs 130 days continuous monitoring.

b) Isolation of oil degrading bacteria for grey water treatment.

The in-house project on Isolation of oil, fat and grease degrading bacteria for the treatment of grey water began on October 2018. Oil degrading bacteria were isolated from oil contaminated soil and water. Totally 13 oil degrading bacteria were isolated. Haemolytic property of the bacterial strains was observed for studying the pathogenicity of the organisms. Competency among the bacterial cultures was studied and noncompetitive organisms were selected further studies. for Efficiency of oil degradation, identification of organisms, shelf life and dosage have to be Efficiency determined. degradation and identification of bacterial strains have to be done in other institutes.

Vermi Compost

IRTC has recognized the importance of managing solid waste by vermicompost and promotes the vermicomposting techniques in the community as cost effective solution to the solid waste management.

The species of earthworm used in IRTC vermi compost unit is Eudrillus euginae. This species of thousand

adult worms weigh approximately one kilogram and one kilogram of adult worm can convert around 5 kg of waste per day. Vermicomposting can be practiced in pits, bins or in pots and can harvest when it contains fewtono scarps of uneaten food. Liquid coming from the unit is rich in micronutrients and can be applied as foliar spray in the ratio 1:10 diluted with water. Cow dung manure is used for the initial degradation of waste materials as these species are less tolerant to temperature.

6.4 NATURAL RESOURCE MANAGEMENT DIVISION

Division Head : R. Satheesh

Project Assistants : Sophy Antony, Dhanoop Mohan,

Praveen K.V, Sabu P.S, Vaisakh P.N,

Shanish V.N, Ajina Kannath, Vivek Ashokan, Rajan M,

RagenduN.R, Pranav S, Abhilash. J, Nikhil K.V, Muhammed Ismail,

Shibu P. SibinK.K

Natural Resource Management Division is one of the major division of IRTC undertaking Land and Water management projects. Many LSGD's are approaching IRTC for consultancy in preparing Detail Project Report in Watershed Management. This division also supporting technical and human resources for NABARD funded projects of IRTC like WADI, POPI and NHWDP sustainable development.

During the reporting year NRM division conducted Watershed based training program for Farmers,

Agricultural Officers and Students. Resource support given for government department like MGNREGS, Suchithwa Mission, Haritha Kerala Mission etc. In order to ease the data collection and compliation jobs, IRTC had decided to migrate to digital mode from hard printed formats. Necessary applications were developed and customized. The data collection is done using internet connected tablets.

GIS BASED DECISION SUPPORT SYSTEM

Watershed Master plan preparation

As part of renewal of watershed master plan delineation of ward, watershed, panchayath had been done at field. Vector layers and jpeg maps of the following gramapanchayaths had also been done for the following Gramapanchayaths. The softwares used include Grass GIS, Quantum GIS and Google earth

- 1. Thirunnavaya gramapanchayath
- 2. Kadappuram gramapanchayath
- 3. Punnayyur gramapanchayath

Training programmes on GIS

Two days basic training programme on GIS was conducted for students from various colleges on GIS softwares open source plat form like Qgis, google earth and GPS tool (No of participants – 12)

6.5 ENERGY AND ELECTRICAL DIVISION

Division Head Project Assistants : Prof. B.M. Musthafa : Indrajith K.S., Shinton P.C.

Rangaswamy .R, Sreeraj P.

Testing of different Luminaries

The E&E lab of IRTC is an approved test Lab for different luminaries like LED lamps, CFL, Induction street lights and electronic ballast. KSEB, LSG's and private manufactures are approaching IRTC to get the samples tested for its quality and performance.

Solar Power Generation

IRTC entered this sector as a service provider as part of our mandate to promote renewable energy. We developed the capability to design and install SPV system in houses and establishments.

6.6 POTTERY & DECOUPAGE DIVISION

Division Head : Dr. M. Lalithambika Project Assistants : Geetha, Subesh Babu

Artist : Rajeesh Kottayi, Rema.M, Yasoda

CLAYS & CLAY MINERALS

Red clay (Terracotta Clay) based activities at IRTC during the reporting period can be classified under 3 heads-Relief work, Decoupage and Ornament Making

Red clay based Relief Work (family tree) at Railway Divisional Office, Palakkad

The Railway Divisional Office, Palakkad has entrusted the work of construction of a 'TERRACOTTA-BASED FAMILY TREE' in Dec. 2018 for an amount of Rs. 8.85 lakhs.

The work was very challenging as it involved the construction of two banyan trees (10 feet high) with its long branches overlapping, with foliage all over and the employees' photographs decoupaged and fixed. The artist Mr. Rajeesh Kottayi's contribution also was of great significance.



Terracotta Family tree at Railway Divisional Office, Palakkad

The work necessitated the preparation of around 1.5 tons of clay, around 6000 banyan leaves and also 500 ceramic circles (hand crafted and baked at 700 degree centigrade) for decoupage work. The work was completed on time. The Divisional office has indicated its satisfaction on the work.

The Chitrakala Swayam Sahaya Sangham has been working at IRTC campus since last five years. Good will and encouragement from IRTC has made this activity self supporting.



Decoupage Terracotta Ornaments

Our major customers during the reporting period were KFRI, Nilambur, Block Panchayath, Sreekrisnapuram, President. Manpathra Nirmana Sahakarana Sangham, Sree Chitra Medical Science Insitute for and Technology, Trivandrum, Christ College, Irinjalakuda and Kerala Institute for Local Administration (KILA).

ORNAMENT MAKING

This work was started at IRTC nearly 8 years back. Newer techniques have been introduced. New designs were tried.

Apart from this we have been participating in exhibitions and imparting Training programs. 25 persons have been trained during 2018-19.

6.7 ENVIRONMENT LABORATORY

Division Head : Prof. P.K. Raveendran

Laboratory Assistants : Nimya.M, Dhanya .T, Hadikka Nesrin V A

IRTC has a 'B' grade certified laboratory under the recognition of Kerala state pollution control board. It is a well-equipped laboratory for R&D works in the fields of water and soil quality studies, soap and cosmetics and solid waste management by giving emphasis on composting technique and biogas plants.

Water Quality Surveillance training was conducted in the month of September & October 2018. Two trainings were conducted. The first training was given to higher secondary school teachers and the second training for Resource Persons of ToT in association with KILA. Number of participants participated in the training programme was 36.

The major objective of the training was to extend water quality analysis in school level and educate common people regarding the importance of water quality analysis.

Many post graduate and under graduate students from various educational institutions are making use of our laboratory facilities, especially in the area of Microbiology, Environmental science, and Chemistry for their internship and project works.

During the year 2018-2019, the following analyses were conducted in the Environmental Laboratory:

Type of analysis	Number of samples	Parameters analysed	
Water	831	pH, Electrical Conductivity, Total Dissolved Solids, Alkalinity, Chloride, Total Hardness, Calcium, Magnesium, Fluoride, Iron, Dissolved Oxygen, Biological Oxygen Demand, Chemical Oxygen Demand, Total coliform and Ecoli.	
Soil	11	pH, Electrical Conductivity, Total Dissolved Solids, Moisture content, Total Organic Carbon, Total Organic matter, Nitrogen, Phosphorus, Potassium	
Oil	11	Saponification value	
Compost	2	pH, Electrical Conductivity, Total Dissolved Solids, Moisture content, Total Organic Carbon, Total Organic matter, Nitrogen, Phosphorus, Potassium.	

6.8 LIBRARY AND DOCUMENTATION CENTRE

Librarians : Priya R, Balaraman Library Assistant : Radhamani .M Doccumentation Ass. : Prajeesh A.

IRTC library has a vast collection of books, reports, journals and other documents related to various topics. It has a collection of 10000 books, 4500 reports and 2000 bound volumes on various areas like Social Work, Rural Development, Energy, Women issues, Environment, Agriculture, Education, Economics, Health, Decentralization, Science and Engineering, Waste management, Land and water management Environmental pollution.

We subscribe to around sixty journals related to above topics. Reports ofstudent projects are also kept in the library. Vikasana Rekha (Development Reports) of various panchayatiraj institutions in Kerala is another valuable asset of this library.

IRTC library is also the documentation centre of Kerala Sastrasahitya Parishad. Most of the KSSP publications are available here. We have the bound volumes of many of the important journals like Current Science, Economics & Political weekly, Down To Earth, New Scientist, Sucheemukhi, Unasylva, KSSP publications Sastragathy, Sastrakeralam, Eureka etc. General public and Research scholars from various institutions visit our library for reference purposes.

6.9 COMPUTER & COMMUNICATION CENTRE

Team : Shinton P.C., Lakshmi T.P., Vilasini V., Reeshma M.

IRTC has a computer and communication centre basically for providing support to its research and training activities. It is also providing opportunity for youngsters for getting experience in DTP and documentation activities. The Computer centre is providing DTP support for various activities carried out by IRTC. The huge volumes of Watershed based

development project reports of various Gramapanchayaths and Block Panchayaths are prepared in this centre.

The entire computer and communication system is working in Linux platform, except for a couple of machines in Accounts Department where we have to maintain the old accounting softwares and data in windows platform.

6.10 AQUACULTURE UNIT

Division Head : Dr. N.K. Sasidharan Pillai Project Assistants : Swathi S, Naveen Babu

Ornamental Fish unit

Ornamental & Edible fish breeding is a skilled activity. It is essential that the entrepreneur should acquire knowledge and skill for mass production of quality fish seeds to manage an ornamental fish breeding unit successfully. This requires hands-on training to the entrepreneurs at a model ornamental fish breeding unit. Ornamental Fisheries Unit of IRTC have the facilities of aqua culture lab, fish





Fish display aquarium

display aquarium, indoor hatchery, out door rearing unit and sales outlet.

Activities

IRTC has involved in a range of activities such as orientation classes, Exhibitions, Workshops, Training programmes for students, farmers and entrepreneurs have been conducted inside campus and outside as well.

Recirculatory Aquaculture Systems & Aquaponics

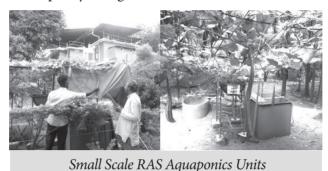
Supported by : Dept. of Fisheries

Grant : INR 2.4 Lakhs (subsidy)
Programme Coordinator : Prof BM. Musthafa

Technical Expert : Dr. NK. Sasidharan Pillai

Director of Fisheries issued aquaculture license certificate to IRTC and also offered a financial support to 2.4 lakhs to growing GIFT Tilopia. for this purpose a new concrete tank was constructed in 50m³ capacity along with

120m² plant bed. Fish seedlings of 2500 nos. deposited in the pond as the first phase. All other activities such as water filter system, 24 hrs power back also installed to increase the fish number to 4000.



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6.11 MUSHROOM CULTIVATION AND SPAWN PRODUCTION

Scientific Staff : Surya Sethumadhavan
Team Members : Sunitha P.L, Sajitha N.C,
Sudha P.S. Padmavathi P.V.

A central spawn cultivation unit as well as a model mushroom cultivation unit are operating at IRTC. Impart training in mushroom cultivation and to extend technical support to mushroom growers in and around Palakkad. IRTC has established the mushroom production centre in the year 1995. Since then this activity has been going on smoothly. Only Oyster Mushroom cultivation has been promoted here so far.

Mushroom Production

The production of oyster mushroom per day has been 3 4 kg. This can be achieved by laying around 10-15 beds per day. And the preparation of mushroom beds has paused for 2 months (March 15–May 15) due to the scarcity of water.

Spawn Production

IRTC is preparing spawn from zea maize (sorghum vulgar) as the possibility of contamination in this case is much less. Our production capacity is around 1350 packets of Mushroom spawn every month.

Mushroom Production and Sales Details

SI. No	Particulars Production	Quantity
1	Total beds prepared	1997
2	Damaged due to contamination	45
3	Total production of mushroom	620.80 kg
4	Sales of Fresh mushroom (200 g pack)	2943
5	Dry mushroom(50 g pack)	47
6	Mushroom powder (10 g. pack)	21
7	Mushroom bed	16

Training Programms

During the reporting year IRTC has conducted 4 training programs (2 inhouse, 2 BIRD Project) with a total of 50 persons.

Mushroom division has undertaken the following activities.

- 1. Mushroom cultivation for rural development; A project funded by KSCSTE entitled "Mushroom cultivation: Capacity development program for livelihood enhancement of the rural women through promoting rural innovations.
- 2. Four 1 day demo workshop has conducted for students from different institutes for the completion of their internship. Total number of 40 students.
- 3. Conducted a one day workshop for 30 students from the Department of Mushroom Cultivation, Kerala Agriculture University.





7. OTHER ACADEMIC ACTIVITIES



7.1 9th INDIAN YOUTH SCIENCE CONGRESS, AT CAREER POINT UNIVERSITY, HAMIRPUR

A team from IRTC, consisting of 9 young Scientists (Surya Sethuma dhavan, Susmitha V, Maria Midhu Francis, Fathima Nashwa, Anju B, Nimya M, Nikhil Sudheesh, Rahul R and Chinchu

C) attended the 9th Indian Youth Science Congress (IYSC) held on April 7th 9th,2018 at Career Point University, Hamirpur. The focal theme of the congress was "Role of Young Scientists in developing new India".

The team from IRTC participated in both oral presentations as well as poster presentations. Paper presented by Mr. Rahul R has been selected as the bestpaper in the Technological innovations session.



IRTC representatives attending 9th IYSC

7.2 INDIA INTERNATIONAL SCIENCE FESTIVAL 2018

India International Science Festival 2018 conducted by Ministry of Science and Technology Govt. of India, Ministry of Earth Science Govt. of India and Vijnana Bharati and coordinate by Department of Biotechnology (DBT), Govt. of Uttar Pradesh and the nodal agency is National Institute of Immunology (NII), Delhi. The Programme was organized at Indira Gandhi Pratisthan Lucknow from October 5th to 8th 2018. Focal theme of the congress was "Science for Transformation". Ms. Fathima Nashwa and Ms. Silpa P. represented IRTC in the festival

In the poster presentation session Fathima Nashwa presented a poster on the topic "Effectiveness of EM enriched coir pit inoculums as composting accelerator" under Swachh Bharat and Silpa P. attented the Plenary and technical sessions.



Poster presentation by Fathima Nashwa

7.3 106th INDIAN SCIENCE CONGRESS (2019 3rd TO 7th JANUARY) LOVELY PROFESSIONAL UNIVERSITY (LPU), PHAGWARA, PUNJAB

The focal theme of 106th Indian Science Congress, conducted by Ministry of Science and Technology, Govt. of India was 'Future India: Science & Technology'.

Renila.R, Silpa. P, Fathima Nashwa, Susmitha V, Hadikka Nesrin V.A.,Shibu P. and Surya Sethumadhavan (Project Assistants) have attended the five day programme.

7.4 PUBLICATIONS

- 1. Lakshmi C.J, Seethalakshmi, K.K and Jijeesh C. M. 2018. Influence of seed storage conditions and germination media in the germination of a priority bamboo species, Dendrocalamus brandisii (Munro) Kurz. Journal of Tropical Agriculture. 56 (2):191196
- 2. **Jijeesh CM** and **Seethalakshmi KK**. 2018. Litter fall, decomposition and nutrient release dynamics of Thyrsostachys oliveri Gamble in humid tropics of Kerala, Southern India. Soil and Environment. 37 (2): 152159
- 3. Ajay.R, Dhanya T.J, Vijayalakshmi M.R, Chauhan A.S and Sreekumar M.M. 2019. Value added products from jackfruits and papaya for food security and sustainable development. Proc. 31st Kerala Science Congress-PP19.
- 4. Susmitha V, Raghunandanan. V.R. 2019. Effectiveness of bacterial inoculam as partial substitute for cowdug in the installation and stabilization of biogas plants.I P innovative publication Pvt. Ltd. (Communicated)
- Raghunandanan.V.R. 2019.
 Malinya Paripalanam: Sasthravum

- Prayogavum, KSSP.P146
- 6. Group of Authors. 2018. Malinya Paripalanam. IRTC
- 7. Sinta.K.B, Sreekumar.S, Diljo Jose.T, Harilal C.C. 2019. Land degradation and water quality assessment of a part of Thrissur kole wetland, Kerala.International Journal of Interdisciplinary research and innovations. Vol.7,Issue.01,P.50-57
- 8. **Rajesh.K.** 2018. Strategy for block planning. Foundation for Ecological Security. Anand, Gujarat
- 9. **Rajesh K.** Local politics and participatory planning in Kerala. Primus books, Delhi (In press)
- 10. Manoj A.K and Sreekumar.S. 2018. Role of discontinuities in the determination of slope stability at Pattikkad along NH47, Kerala. Journal for advanced research in applied sciences. Vol.5,Issue.1,PP 307-313
- 11. **Chinchu. C** (2018). Mapping the bisexual experience of a Keralite woman: glimpses into India. Sexual and Relationship Therapy, 33(1–2). 135–145. ISSN: 1468-1749. Routledge, UK. https://doi.org/10.1080/14681994.2017.1419566

- 12. **Chinchu, C.**, & Kadhiravan, S. (2018). Mental Health and Organizational Culture Among IT Professionals. Global Journal of Advanced Research, 5(1), 4–9. ISSN: 2394-5788
- 13. **Chinchu, C.**, & Kadhiravan, S. (2018). Self-Regulated Behaviour and Mental Health Among IT Professionals. International Journal of Human Resource Management and Research, 8(1), 35–40. ISSN: 2249-7986 https://doi.org/10.24247/ijhrmrfeb20184
- 14. **Chinchu, C.** (2018). Whither those Unheard Voices? Neglected Languages of India. Global Journal of Archaeology & Anthropology, 5(1), 2. ISSN: 2575-8608 DOI: 10.19080/GJAA.2018.05.555652
- 15. Chinchu C. (2018). Blind Spots in Transgender Mainstreaming: The Case of Kochi Metro. Proceedings of International Conference on Gender Equality through the Strategy of Gender Mainstreaming. Bengaluru: Presidency University.
- 16. Surya Sethumadhavan,
 Parvathy T., & Chinchu C.
 (2018). Water Quality Literacy
 Through a Participatory Water
 Quality Assessment Programme.
 Proceedings of 30th Kerala Science
 Congress. Kannur: Government
 Brennan College.

- 17. Chinchu, C. & Anju B. (2018).

 Community Mental Health: A
 Participatory Model for Kerala.

 Proceedings of 9th Indian Youth
 Science Congress. Hamirpur,
 Himachal Pradesh: Career Point
 University.
- 18. Chinchu C. (2018). Awareness Regarding Menstrual Cups Among Early Adult Women of Kerala. Proceedings of National Seminar on Gender and SRH Rights. Thenhipalam: University of Calicut
- **19.** Training modules course contents targetedtodifferentstakeholderswere prepared. The stakeholders include Elected representatives and officials of Rural and Urban Local Bodies, Haritha Karma Sena members and Co ordinators, Kudumbasree workers and entrepreneurs. The werewaste themes collection systems, composting technologies for domestic and community level processing, plastic collection and sorting, MRF management, plastic recycling and end of life energy recovery technologies, biomedical waste disposal and legal aspects. Training modules are also available for conducting internship trainings to UG and PG students.

7.5 ACHIVEMENTS AND RECOGNITIONS

- The 3R Excellence Award for the civil society organisations for the exemplory
 works in the area of waste management at 8th Regional Forum in Asia and the
 Pacific at 12th April 2018 at Indore.
- Kerala State Renewable Energy Award 2018 (Akshaya Oorja Award 2018) in the category of non-profitable organization award by ANERT, Department of Power, Govt. of Kerala.



8. FINANCIAL STATEMENT



		SOCIETY FOR	RINTEGRATED	SOCIETY FOR INTEGRATED RURAL TECHNOLOGY CENTRE	OGY CENT	TRE	
			Mundur, Pal	Mundur, Palakkad - 678 592			
		BAL	ANCE SHEET AS	BALANCE SHEET AS AT 31ST MARCH, 2019	2019		
LIABILITIES	SCH.	SCH. Amount as at	Amount as at	ASSETS	SCH.	Amount as at	Amount as at
		31.03.2019	31.03.2018			31.03.2019	31.03.2018
Capital Fund	-	459,55,557.62	419,95,181.01	Fixed Assets	4	336,93,985.00	352,74,585.00
Project Fund Balances	2	46,11,863.65	140,92,421.15	Advances from General Fund	5	124,39,662.00 152,75,140.00	152,75,140.00
Current Liabilities & Provisions	8	93,16,002.29	65,22,323.25	Current Assets, Loans & Advances	9	137,49,776.56 120,60,200.41	120,60,200.41
		598,83,423.56	626,09,925.41			598,83,423,56 626,09,925,41	626,09,925.41

AUDIT REPORT

As per our Report on even date annexed

For Ranjit Karthikeyan Associates Chartered Accountants Firm Regn No: 06705S sd/-

T. K. Muralidharan M.Com. FCA Partner (Mem. No: 211385)

sd/-REGISTRAR

sd/-DIRECTOR

Schedule Forming Part of Balance She	et as at 31-03-201	9
	Amount (Rs.)	Amount (Rs.)
SCHEDULE: 1	31.03.2019	31.03.2018
Capital Fund:		
Opening balance	391,34,938.01	319,42,776.94
Add: Excess of Income over Expenditure	3,17,546.12	3,58,100.07
Add : Amount Transferred from Project Fund	33,24,829.50	68,34,061.00
Total	427,77,313.62	391,34,938.01
Reserve Fund		
Contingency Reserve Fund:		
Opening balance	28,60,243.00	16,56,663.00
Add: Amount Received during the year	3,18,001.00	12,03,580.00
Total	31,78,244.00	28,60,243.00
	459,55,557.62	419,95,181.01
SCHEDULE: 2		
Project Fund Balances		
Biogasplant - Koyilandy Municipality	1,93,771.00	1,93,771.00
Biogas Plant - Medical College,Kozhikode	6,07,588.25	5,41,338.25
Biogas Plant - Payyannur	64,182.00	64,182.00
Biogasplant - Kaladi GP	26,780.00	26,780.00
Biogas Plant - Nilamel GP	540.00	540.00
Biogas Plant - Panachikkad GP	(54,089.00)	(54,089.00)
Biogas Plant - Punnapra GP	3,900.00	3,900.00
Chittur -Tattamangalam - DPR Prep (SWM Proj)	61,570.00	-
Clean Chaliyar Project- Nilambur Block Panchayath	-	(6,56,253.00)
ILCS - Kanhangad	14,696.00	14,696.00
ITDP, Attappady-Training Program (Enhang. Emplblty)	27,761.00	3,58,570.00
IWMP - Chittur	-	4,85,965.00
KSCSTE -Emeritus Scientist Scheme -Dr.Seethalakshmi	-	(938.00)
KSCSTE -EMO Preparation II	(2,65,022.00)	(2,65,022.00)
Karumkulam Grama Panchyath, TVM	5,265.00	3,57,918.00
KSCSTE - Mashroom 'bird' Training	(22,993.00)	(18,593.00)
KLGSDP	-	9,07,828.00
NABARD - SDP (RSO)	1,80,635.00	2,35,000.00
NABARD - WADI TDF Project Measurers)	12,68,700.00	45,50,723.00
NABARD Water Campaign (jaladoot)	-	1,75,524.00
NABARD - WADI TDF Proj.(Manag.Fund)	(5,80,210.60)	87,818.40

		∠∪ 18-18
RWH Tank-Elappully (Govt.APHSS)	-	1,71,761.00
Slaughter House - Kunnamkulam	7,32,664.00	7,32,664.00
SWM - Vaniyamkulam	2,36,532.00	2,36,532.00
Theeramythri Project 2017-18	-	1,84,073.00
Thirur Ponnani Puzha - DPR Preparation	(7,82,072.00)	7,18,854.00
Sustainability Plan for NHWDP Watersheds (NABARD)	5,05,268.00	4,78,278.00
WSP - Edapatta	-	(418.00)
WSP - Edathuruthy	-	(43,501.00)
WSP - Kadappuram Grama Panchayath	81,720.00	2,87,849.00
WSP - Kozhikode BP	8,84,176.00	5,00,000.00
WSP - Mangalam GP	38,167.00	4,37,604.00
WSP - NREGS Masterplan Preparation	-	24,20,453.50
WSP - Punnayur Gramapanchayath	63,765.00	5,58,481.00
WSP - Thirunavaya GP	76,899.00	2,08,400.00
WSP - Thriprangode GP	2,560.00	1,91,732.00
Kerala State Biodiversity Board, TVM	91,546.00	-
"KILA - Impact Assmt -Capacity Buildg Muni Officials	57,414.00	
"Ranni Pazhavangadi SWM (DPR)	1,26,194.00	
"SCERT - Comparitive Study of Pre Schooling System	43,754.00	
"St. Planning Board - Role of MRS Perform. Analysis	2,05,700.00	
"Theeramythri Project 2018-19	73,537.00	
"WSP - Karuvarakundu GP	4,97,162.00	
"WSP - Melattoor GP	1,43,804.00	
Total	46,11,863.65	140,92,421.15
SCHEDULE: 3		
Current Liabilities & Provisions		
Current Liabilities		
CGST Payable 2017-18	-	2,06,418.50
SGST Payable 2017-18	-	2,06,418.50
CGST Payable 2018-19	3,71,044.52	-
SGST Payable 2018-19	2,07,814.52	-
IGST Payable 2018-19	34,110.00	-
CGST RCM Payable 2017-18	450.00	-
SGST RCM Payable 2017-18	450.00	-
Jack Fruit - Value Addn.Project	-	(37,271.00)
		·

		2010-18
Chemind Chemicals, Palakkad	8,452.00	-
Co Ordinator, Kerala St. Bio.Board Payable	12,000.00	-
Co-ordinator, Pottery Cluster Peravur	96,202.00	96,202.00
Co-ordinator Waste Management Project	1,50,000.00	1,50,000.00
Creatureway, Aliparambu	17,200.00	-
Elico Limited	1,65,000.00	1,65,000.00
Energy Efficient Klin (DST) Payable	20,969.00	26,969.00
Honorarium Payable - Prof V.R.Raghunandanan	1,44,000.00	-
ESIC Deducted and Payable	16,608.00	-
Instrumentation, Coimbatore (Nunes Instruments)	-	2,40,000.00
IRTC Project Imple Unit Payable (R & D Activities)	7,49,287.00	8,75,000.00
IRTC Staff Welfare Society	1,41,260.00	-
ST @15% 2017-18 (14 %)	-	33.00
Swa.Bharat Cess@ 0.5 % 1718	-	4.00
NABARD Integr.Tribal Dev.Programe(ITDP)	2,502.00	1,282.00
Staff welfare fund	217.25	4,217.25
PPC Waste Management Unit	34,11,821.00	40,44,971.00
Project Investigator, DBT Payable	83,000.00	-
Pudur Kurumba Society	23,875.00	-
Salary/Honora. Payable - B.M.Musthafa	53,390.00	-
TDS Payable 2017-18	-	49,564.00
Krishi Kalyan Cess @0.5 % 17-18	-	4.00
TDS Deducted & Payable 2018-19	3,729.00	-
Village Extn Officer, Pothencode GP	20,650.00	-
Powermech Diesel Generator	10,000.00	10,000.00
Sunil Contractor, Biogas plant	-	789.00
Data Collect.Entry Payable - Krishna.S.Nair	33,722.00	33,722.00
FGD Payable - Krishna.G.Nair	85,249.00	1,00,000.00
Honorarium Payable - Krishna . G. Nair	-	45,000.00
Digital Studio Work - Friends of KSSP	1,00,000.00	-
Digital Studio Work - KSSP Kannur	1,00,000.00	-
Senthil Kumar Payable (Printing Charges)	4,000.00	4,000.00
St.Mary's DTP and Photostat Centre Payable	1,50,000.00	1,50,000.00
Grant in Aid DST - Bio-Tech Kissan	29,99,000.00	
Suchithran . P Payable (Impact Analysis)	1,00,000.00	1,50,000.00
Total	93,16,002.29	65,22,323.25

SCHEDULE: 5		
Advance from General Fund		
ANERT -Essay Competition	-	34,862.00
Biogas Plant - Airport, Karipur	-	1,76,135.00
Biogas Plant - Manjeri Municipality	(67,986.00)	54,259.00
Biogas Plant - Koduvally	-	1,61,300.00
Biogas Plant - Alappuzha Municipality (Suchitwa)	5,74,125.00	4,93,125.00
Biogas Plant - Alappuzha Municipality II	5,88,877.00	4,09,727.00
Biogas Plant - Areacode GP	1,08,000.00	1,08,000.00
Biogasplant - Chengamanad GP	50,400.00	81,900.00
Biogasplant - Elayavoor GP	8,530.00	8,530.00
Biogasplant - Kadampazhipuram	-	92,925.00
Biogas Plant - Kadampazhipuram-II	-	85,575.00
Biogasplant - Kannadi GP	67,500.00	67,500.00
Biogasplant - Keezhuparambu GP	1,75,500.00	3,22,800.00
Biogasplant - Kollam Corporation- II	7,16,180.00	6,69,080.00
Biogasplant - Kollayil GP	(2,500.00)	(2,500.00)
Biogas Plant - Koratty GP	61,000.00	61,000.00
Biogas Plant - Kozhikode Corporation	47,600.00	1,97,200.00
Biogasplant - Kundara GP ,Kollam	66,000.00	66,000.00
Biogas Plant - Kunnathukal GP	12,240.00	12,240.00
Biogasplant - Lakkidi Perur (Jalanidhi)	64,181.00	64,181.00
Biogasplant - Manamboor GP	-	93,500.00
Biogasplant - Perinad GP	1,49,500.00	1,49,500.00
Biogasplant - Pookkottukavvu GP	1,26,000.00	1,26,000.00
Biogasplant - Puthuppally GP	36,000.00	36,000.00
Biogasplant - Social Justice, TVM	(1,08,504.00)	(1,08,504.00)
Biogasplant - Thodiyoor GP	83,225.00	83,225.00
Biogasplant - Velloore GP	29,700.00	29,700.00
Chittur Municipality -DPR Preparation (SWM Proj)	1,735.00	1,735.00
DST - Core Support	-	10,97,405.00
DST - SORF (DISHA)-Uma J vinod	59,041.00	59,041.00
FFDA ,Malampuzha	37,622.00	-
Green Climate Fund(GCF)-Palakkad Gap of Wes.Ghats	5,162.00	-
Haritha Sahaya Sthapanam	1,06,504.00	-
IWMP -Kanjikuzhy	-	4,06,215.00
IWMP -Pampakuda	-	-

		2018-18
Jalanidhi - RWH Tanks Idukki	-	2,50,000.00
KSCSTE Centre of Excellence in waste management (Non plan)	-	25,33,982.00
KSCSTE Core Support 2017-18	23,42,082.00	23,42,082.00
KSCSTE - National Science Day 2018	22,750.00	22,750.00
KSCSTE - National Science Day 2019	13,098.00	-
KSCSTE - World Wet Land Day 2019	22,125.00	-
KSCSTE- National Science Day 2017	-	26,251.00
KSCSTE - Workshop on Jack Fruit Processing	-	510.00
KSCSTE -National Technology Day 2017	-	2,704.00
KSCSTE - World Environment Day 2017	-	450.00
KSCSTE - World Wetland Day 2018	-	26,250.00
KSEB, Mundur Addl.Cash Deposit (ACD)	84,500.00	84,500.00
KSEB, Mundur - Security Deposit(New)	23,550.00	23,550.00
Ozone Day Celebration - 2018	-	-
NABARD POPI Project	-	(55,652.00)
Palakkuzhy Small Hydel Project	34,539.00	34,539.00
Pipe Compost - Kasaragod Municipality	1,43,280.00	1,43,280.00
Pipe Compost - Koottilangadi GP	2,17,500.00	5,57,500.00
Pipe Compost - Pirayiri Panchayath	95,400.00	95,400.00
SAF - Leadership for Faculty Assistants	-	-
SWM - Kunnamkulam	22,25,697.00	22,25,697.00
Social Justice Dept - Anganwadi Teachers Training	-	18,21,841.00
Shornur Municipality - DPR Preparation (SWM Proj)	(1,86,029.00)	1,850.00
Apparel Training and Design Centre	26,949.00	-
DRDA, Rohtas, Bihar	5,13,128.00	-
Dt. Mission Co Ordinator, Kudumbasree, Palakkad	7,375.00	-
National Institute of Agri.Extension Management	94,347.00	-
Secretary, Kavassery Grama Panchayath	1,770.00	-
Thaluk Head Quarts Hospital, Ottappalam	7,906.00	-
The Dep.Gen.Manger ,Airport Authority of India	2,18,051.00	-
The Director, KILA	23,37,091.00	-
The Principal, Govt .Medical College, Kozhikode	7,66,705.00	-
The Secretary, Palakkad Small Hydro Co	4,32,216.00	-
Total	124,39,662.00	152,75,140.00

SCHEDULE: 6		
Current Assets, Loans and Advances		
Cash and Bank Balances		
Cash in Hand	58,125.00	23,950.00
SBI A/c No:10590557836	2,08,991.95	12,946.95
SBT A/c.No:57028786873	16,59,827.87	15,267.10
SBT A/c.No:67324608083	5,515.00	7,27,793.40
SBT A/c.No:67324608107	6,566.20	2,16,627.60
PNB A/c. No. 4318000100074822	83,621.55	2,49,086.65
PNB A/c. No. 4318000100050549	1,46,807.58	1,35,050.68
PNB A/c. No. 4318000100051557(DDWS)	4,271.19	4,251.89
PNB A/c. No. 4318000100082177(Contingency Reserve Fund)	4,44,619.80	3,46,197.90
PNB A/c No:4318000100057223(RSO NABARD)	2,39,883.00	2,45,230.00
PNB A/c No:4318000100085110 (Social Justice Dept)	38,036.14	14,82,872.24
PNB FD A/c No: 4318000R00000908	5,00,000.00	5,00,000.00
PNB FD A/c No: 4318000R00000917	5,00,000.00	5,00,000.00
PNB FD A/c No: 4318000R00000926	5,00,000.00	5,00,000.00
Treasury Savings Bank A/c No:5607	58,269.00	25,46,134.00
Canara Bank A/c No: 077310104773	12,84,999.00	45,67,022.00
Canara Bank A/c No: 0773101015124(ITDP)	2,502.00	1,282.00
PNB A/c No :4318000100090103 (HSS)	33,111.00	-
SBI A/c No:38318582589 (Bio Kissan)	29,99,000.00	-
Total A	87,74,146.28	120,73,712.41
WIP PROJECTS		
WIP Clean Chaliyar Project - Nilambur Block Panchayath	3,61,628.00	-
WIP DBT - Foldscope Scheme	46,462.00	-
WIP KILA -Impact Assmt - CFLG	31,129.00	-
WIP KSCSTE Plan Grant in Aid 18-19	32,50,521.28	-
WIP KSCSTE Research Methodology	23,376.00	-
WIP KSCSTE Value Added Products Jack/mango	18,802.00	-
WIP Nabard - Chaliyar & Urangattiri (DPR)	87,014.00	-
Total B	38,18,932.28	-

Advances		2018-
Ancy	-	10,000.00
B. Bharathen (Rent Adv- Karimkulam DPR)	-	10,000.00
Co Ordinator, Nabard Wadi Project	50,000.00	-
Coordinator, TRP Project	-	8,000.00
Deependra .S	20,000.00	
Dhanoop Mohan N	-	20,000.00
Dr. Seethalakshmi KK	-	(29,000.00)
Mohammed Ashraf(Rent Adv Thirur Ponnani)	14,000.00	-
Muralidas. A	2,000.00	-
IRTC Project Implementation Unit	6,297.00	(7,28,951.00)
Nabard Office WATI Project Aleyamma KC Room Rent Adv.	30,000.00	30,000.00
Noorudheen (Room Rent Kadappuram)	15,000.00	-
Rangaswamy	12,500.00	-
Rejish.R (Mural Work)	3,50,000.00	-
T.F.Francis (ILCS Project)	1,00,000.00	1,00,000.00
BSNL, Palakkad	18,000.00	-
Yingel Ladies Hostel (WSP, Tripangode)	-	4,500.00
Rugmini AP	-	12,125.00
Sarojini	-	25,000.00
Sheeja. P.V	10,000.00	-
Sheeja V .K	10,000.00	-
Shinton	14,250.00	-
Sindhu Manoj(Room Rent,WSP Trigode)	5,000.00	5,000.00
Sree Sankar, Co-Ordinator, Karimkulam GP	-	27,000.00
Sreesankar (Harithakeralam Mission)	10,000.00	-
SMART (ATDC) - TVM	-	48,641.00
BUDS Schools& Reha. Centre pazhayannur	-	(44,274.00)
KSSP General	6,990.00	-
RK Associates	3,944.00	3,944.00
RATTC - Malampuzha	(4,800.00)	(4,800.00)
KILA, Thrissur	-	(18,310.00)
Kudumbasree - Palakkad	19,300.00	48,650.00
Melattoor Room Rent Advance	5,000.00	-
Muthalamoorkan Kadavu Boating - Vellinzhi GP	(25,000.00)	(25,000.00)
Nirmithi Kendram TVM - Training On Biogas Unit II	(1,80,000.00)	(1,80,000.00)
Pottery Training - SBIOA, Chennai		6,410.00

Parishad Production Centre	(1,57,354.00)	(5,500.00)
SWM Training Programme	-	(1,34,500.00)
C.P.Sasindran,Co-Ordinator, Watershed Project	20,000.00	-
Staff Insurance(LIC) - Jeevan Tharang	81,924.00	-
Taluk Head Quarters Hospital, Ottappalam	-	1,652.00
Thalasseri Muncipality - DPR Preparation (SWM Project)	(1,34,028.00)	20,762.00
TDS FY 2015-16	2,26,788.00	2,39,440.00
TDS FY 2016-17	-	2,75,746.00
TDS FY 2017-18	2,59,953.00	2,59,953.00
TDS Input 2018 - 19	3,55,807.00	-
CGST TDS 2018-19	5,563.50	-
SGST TDS 2018-19	5,563.50	-
Total C	11,56,698.00	(13,512.00)
Total (A + B +C)	137,49,776.56	120,60,200.41

			SOCIETY FOR IN	TEGRATED RUR	AL TE	SOCIETY FOR INTEGRATED RURAL TECHNOLOGY CENTRE			
				Mundur, Palakkad - 678 592	929 - p	592			
		INCOME	& EXPENDITURE	ACCOUNT FOR	гне ун	& EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2019	(, 2019		
	EXPENDITURE	SCH.	AMOUNT	AMOUNT		INCOME	SCH.	AMOUNT	AMOUNT
			31.03.2019	31.03.2018				31.03.2019	31.03.2018
To	Administrative Overheads	17	62,44,582.33	71,28,494.85	By	General & Administrative Income	7	14,37,232.81	92,56,020.11
To	Agricultural Expenses	18	29,637.00	1,57,588.00	By	Agriculture Income	8	1,87,710.00	2,16,511.00
To	Fisheries Expenses	19	54,959.00	48,959.00	By	Fisheries Income	6	21,995.00	10,290.00
To	Mushroom Expenses	20	3,90,641.00	5,40,472.00	By	Mushroom Income	10	5,14,844.00	5,23,920.00
To	Pottery Expenses	21	20,825.00	1,64,007.00	By	Pottery Income	11	45,275.00	48,120.00
To	SWM IRTC Expenses	22	1	8,388.00	By	SWM IRTC Income	12	29,020.00	59,655.00
To	Purchase of Biobin Unit		ı	1,12,500.00	By	Sale of Biobin Unit		ı	1,12,500.00
To	Purchase of Biogas Plant		4,85,714.18	28,18,732.00	By	Sale of Biogas Plant		4,85,714.18	28,18,732.00
To	Purchase of Pipe Compost		ı	7,07,464.00	By	Sale of Pipe Compost		ı	7,07,464.00
To	Project Expenditure	23	91,05,449.00	ı	By	Project Income	13	93,05,170.00	1
To	Training Expenditure	24	33,15,153.00	ı	By	Training Income	14	83,07,550.00	1
To	Annual Maintanence & Consultancy Charges	25	20,95,311.04	1	By	Annual Maintanence & Consultancy	15	34,57,546.00	1
To	Grant in Aid Expenditure		83,92,399.00	-	By	Grant in Aid Received	16	83,33,000.00	1
To	Depreciation	4	16,72,840.32	17,08,507.19					
To	Excess of Income over Expenditure		3,17,546.12	3,58,100.07					
			321,25,056.99	137,53,212.11				321,25,056.99	137,53,212.11

AUDIT REPORT

As per our Report on even date annexed.

For Ranjit Karthikeyan Associates

Chartered Accountants Firm Regn No: 06705S Sd/-T. K. Muralidharan M.Com. FCA Partner (Mem. No: 211385)

Sd/-REGISTRAR

sd/-DIRECTOR

SOCIETY FOR INTEGRATED RURAL TECHNOLOGY CENTRE			
Mundur, Pala	kkad - 678 592		
Schedule Forming Part of Inc		unt	
for the year en	ded 31-03-2019	1	
Particulars	Amount as at		
	31.03.2019	31.03.2018	
Schedule- 7			
General & Administrative Income			
Accommodation Charges Received	34,204.00	51,60,180.00	
Bank charges	83.78	-	
Consumables	339.00	-	
Documentation Charges Received	-	4,000.00	
Exhibition expense reimbursement	6,779.00	-	
Faculty Charges Received	2,966.00	29,136.00	
Chemical Charges	13,174.00	11,081.00	
Honorarium	-	78,827.00	
Institutional Fee	5,78,264.03	23,54,719.00	
Interest Received	1,10,019.00	1,08,301.00	
Interest on Income Tax Refund	76,175.00	32,348.00	
Map Preparation Charges	-	5,000.00	
Office Stationary	22,000.00	11,082.00	
Printing & Xerox Received	1,128.00	65,412.00	
Rent Received:-	-	-	
Hall& Equipment Rent	-	6,89,797.00	
Rent (BSNL)	45,768.00	46,065.00	
Chemical Lab	-	8,152.00	
Scrap Sales	10,981.00	58,116.11	
Testing Fee:-	-	-	
CE Lab	4,96,381.00	4,62,840.00	
EE Lab	23,200.00	46,400.00	
Security Deposit-Refund KSEB	-	18,771.00	
Soap Training Charges	-	8,480.00	
Training fee GIS	11,441.00	-	
Training fee - jackfruit	3,390.00	-	
Training Materials -Consumables	-	8,625.00	
Travel & Conveyance- Resource Person	110.00	-	

		2018-
Training Program - Well Recharging		35,088.00
Transportation charge	508.00	-
Vehicle Hire Charges Received	-	13,600.00
Xerox & printing charges	322.00	-
	14,37,232.81	92,56,020.11
C. L. L. L. O.		
Schedule- 8		
Agricultural Income	C 520.00	4.065.00
Nursery Plants	6,530.00	4,065.00
Medicinal & nursery plants	1,290.00	-
Rubber Sheet	95,714.00	1,25,210.00
Vegetables	40,800.00	9,736.00
Sale of Plants	-	36,500.00
Consumables	43,236.00	41,000.00
Hanginh pot with plants	140.00	-
	1,87,710.00	2,16,511.00
Schedule- 9		
Fisheries Income		
Azola	5,630.00	6,630.00
Fish feed and Accessories	16,365.00	3,660.00
	21,995.00	10,290.00
Schedule- 10		
Mushroom Income		
Mushroom	4,78,410.00	5,23,920.00
Training - Mushroom	36,434.00	-
0	5,14,844.00	5,23,920.00
Schedule- 11		
Pottery Income		
Micro Wavable Pot	-	400.00
Ornaments	45,275.00	40,350.00
Pots - Raw	-	300.00
Clay - Pugged	-	5,070.00
Training Fee - Pottery	-	2,000.00
,	45,275.00	48,120.00

Schedule- 12		
SWM IRTC Income		
Compost Sales	16,120.00	42,935.00
Compost - Earthworm	11,650.00	12,220.00
Pots - Vermi (Earth worm)	500.00	4,500.00
Pots vermi(empty)	750.00	-
	29,020.00	59,655.00
Schedule- 13		
Project Income		
Alanallur GP-Vellachattapara Small Hydro Proj Income	21,186.00	-
ANERT -Essay Competition Income	55,932.00	-
Clean Chaliyar Project - Nilambur BP Income	3,01,530.00	-
DBT - Foldscope Scheme Income	6,15,696.00	-
DST-Vigyan Prasar Climate Change & GW Income	1,19,000.00	-
DST - Vigyan Prasar Sustainable Development Income	2,38,000.00	-
Elephant Instrusion Detection System Income	15,897.00	-
ITDP,Attappady-Training Program Income	6,37,049.00	-
Kerala State Biodiversity Board ,TVM Income	98,534.00	-
KILA - Impact Assmt -CBPMO Income	1,95,696.00	-
KILA -Impact Assmt - CFLG Income	4,09,649.00	-
KSCSTE - National Science Day 2017 Income	25,000.00	-
KSCSTE - Research Methadology Income	20,000.00	-
KSCSTE- Tech in Transformg Women's Lives Income	30,000.00	-
KSCSTE WORLD ENVIRONMENT DAY Income	15,000.00	-
KSCSTE - World Wetland Day 2018 Income	25,000.00	-
Nabard - Chaliyar & Urangattiri (DPR) Income	30,000.00	-
NABARD POPI PROJECT Income	1,80,815.00	-
NABARD - SDP (RSO) Income	2,42,999.00	-
Ranni Pazhavangadi SWM (DPR) Income	9,506.00	-
SCERT - Comp Study of Pre Schg System Income	1,16,246.00	-
Social Justice Dept -Anganwadi Teachers Train Income	18,21,841.00	-
St. Plg Board - Role MRS Perfororm Nalysis Income	1,85,900.00	-

		2018-19
Sustainability Plan for NHWDP WSP (NABARD) Income	3,010.00	-
Swm Training Program Receipt	3,45,500.00	-
Thalasseri Municipality - DPR (SWM Proj Income	21,410.00	-
Theeramythri Project - 2017-2018 Income	5,12,073.00	-
Theeramythri Project 2018-19 Income	14,51,885.00	-
WSP - Karuvarakundu GP Income	2,838.00	-
WSP - Melattoor GP Income	1,96,096.00	-
WSP - Punnayur Gramapanchayath Income	5,49,661.00	-
WSP - Thirunavaya GP Income	4,44,101.00	-
KSCSTE - Value Added Products Jackfruit/Mango Income	1,98,802.00	-
Shornur Municipality - DPR (SWM Proj) Income	3,494.00	-
WSP - Kozhikode BP Income	1,65,824.00	-
	93,05,170.00	-
Schedule- 14		
Training Income		
Training Receipts - BRC (JAWLA)	26,450.00	-
Training Receipts - Capacity Building Program	7,000.00	-
Training Receipts - Coffee Board	4,915.00	-
Training Receipts - CREST	2,95,700.00	-
Training Receipts - CUTEC, Koduvayur	9,322.00	-
Training Receipts - DBT	5,000.00	-
Training Receipts - DIET	13,204.00	-
Training Receipts - Fellowship Artists	6,11,809.00	-
Training Receipts - GHSS Vettathur	6,250.00	-
Training Receipts - Gifted Children Program	3,390.00	-
Training Receipts - KILA	6,92,559.00	-
Training Receipts - KILA (Ardram Mission)	46,31,536.00	-
Training Receipts - KSCSTE	63,502.00	-
Training Receipts - KSGIEU	22,500.00	-
Training Receipts - Kudumbasree	58,000.00	-
Training Receipts - Leadership Training	16,000.00	-
Training Receipts - MANAGE, Hyderabad	1,33,345.00	-
Training Receipts - Mushroom Cultivation(ATMA)	3,898.00	-
Training Receipts - RMSA	1,17,375.00	-
Training Receipts - Rohtas, Bihar	7,54,600.00	-

		2018-19
Training Receipts - SCERT	36,000.00	-
Training Receipts - SIET	2,52,330.00	-
Training Receipts - TDF (NABARD)	19,465.00	-
Training Receipts - Theeramythri (Capacity Buildg)	97,900.00	-
Training Receipts - Theeramythri Proj(Perfo Improv)	4,25,500.00	-
	83,07,550.00	-
Schedule- 15		
Annual Maintanence & Consultancy income		
Annual Mainte.Charges-Biogasplants at Med.Colle. Kkd	14,25,000.00	-
Annual Mainte. Charges-Biome.Plant&STP Airport Kkd	2,45,000.00	-
Biogas Plant - Airport, Karipur	47,249.00	-
Biogas Plant - Medical College,Kozhikode	3,10,000.00	-
Consultancy Charges-Haritha Sahaya Sthapanam (SWM)	28,360.00	-
Consultancy Charges -Palakkuzhy Small Hydel Project	9,23,511.00	-
Hall Rent - IRTC Project Implementation Unit	12,000.00	-
Hall Rent - SMART, ATDC, TVM	2,99,376.00	-
Holistic Watershed Devp Plan- KILA Thaliparambu	1,00,050.00	-
Instal. Port.Biogas Plants & Training Pondicherry	67,000.00	
	34,57,546.00	-
Schedule- 16		
Grant In Aid Received		
KSCSTE- NON PLAN 2018-19	50,00,000.00	
KSCSTE - Plan Grant-in-Aid 2018-19	8,33,000.00	
KSCSTE - Cen .Exce.in Waste Mangmt Income	25,00,000.00	
	83,33,000.00	-
Schedule- 17		
Administrative Overheads		
Advocate / notary fee	5,000.00	-
Appeal filing fee	1,500.00	-
Audit Fee	75,000.00	60,000.00
Accomodation Charges	-	3,84,000.00
Bank Charges	7,369.68	5,947.93

Banner Writting Charges	4,363.00	6,152.00
Annual Maintanence Contract Fee	-	8,200.00
Computer Rent	15,000.00	94,150.00
Consultancy Charges	55,500.00	3,700.00
Consumables	76,243.00	2,09,164.00
Communication Expenses	6,422.00	6,537.00
Donation	15,000.00	
Electricity Charges	4,61,029.00	3,88,135.00
Exhibition Expenses	-	10,904.00
Exgratia Allowances	-	23,550.00
ESI Employers contribution	1,49,317.00	1,29,477.00
Festival Allowances	2,77,500.00	2,08,500.00
Food expense	3,00,641.00	-
Generator POL	23,984.00	-
Gratuity paid	1,14,750.00	-
Honorarium	13,17,051.00	8,09,458.00
Group Insurance Paid (Employers Contribution)	-	87,807.00
Interest CGST 2017-18	49,185.00	-
Interest IGS 2017-18	3,884.00	-
Interest SGST 2017-18	49,185.00	-
Institutional Overhead	3,91,487.00	12,75,880.00
GST Arrears	29,493.00	
Interest on Service Tax	-	10.00
Interest on TDS	50.00	60.00
Installation charges	-	20,520.00
Layout & design	6,000.00	-
Library & Periodicals	20,843.00	17,201.00
Labour charges	-	78,700.00
Medical Expenses	4,361.00	10,780.00
Motor Vehicle - Insurance	27,262.00	28,825.00
Motor Vehicle - POL	13,776.00	4,134.00
Motor vehicle -repair & mainte KL9/AD3352	1,50,230.00	-
Motor vehicle -repair & mainte KL9/M6319	1,32,031.00	-
Office Expenses	-	73,858.28
Office Stationery	-	39,317.00
Postage & Courier	15,238.00	5,705.00
Pension Contribution P.K Narayanan	2,72,160.00	-

		2010-1
Registration charges KL9M 6319	16,030.00	-
Registration Fee & resource Materials	1,800.00	14,480.00
Renewal Fee	2,898.00	17,795.00
Renewal sun direct Fee	3,269.00	
Rent, Rates & Taxes (Building)	1,38,563.00	2,74,727.00
Rent & Hire Charges	28,000.00	12,450.00
Rent, Rates & Taxes	3,703.00	3,527.00
Repairs & Maintenance - Motor Vehicle	-	82,601.00
Repair & Maintenance	28,119.00	66,055.00
Repair & Maintenance Generator set	8,844.00	-
Return filing	6,500.00	-
Round Off	(796.25)	-
Refreshment	-	94,536.00
Generator-POL	-	40,842.00
Late Fee-CGST	-	3,750.00
Late Fee-SGST	-	3,750.00
Maintenance of Campus	39,690.00	9,92,568.00
Salaries & Allowances	-	5,85,150.00
Security Service Charges	4,272.00	56,000.00
Ser tax -penalty 2016-17(return filing)	500.00	-
ST arrears 2014-15 & 15-16 predeposit	1,19,861.00	-
ST arrears 2014-15 with interest	2,76,190.00	-
ST arrears 2015-16 with interest	4,53,572.00	-
ST arrears 2016-17 with interest	2,59,117.00	-
ST arrears 2017-18 with interest	75,823.00	-
Telephone Charges	61,121.40	55,291.00
Training fee - jackfruit	500.00	-
Training Expenses	-	9,000.00
Training Program -Well Recharging	-	25,092.00
Transportation Charges	-	13,050.00
Travel & Conveyance	1,26,901.18	1,45,543.00
Tender Charges	1,000.00	14,692.00
Vehicle Hire Charges	-	1,300.00
Wages	97,655.00	1,17,820.00
Water Charges	60,000.00	1,32,700.00
Xerox & Printing Charges	26,431.00	42,337.00
CGST Input Not Eligible	1,57,132.16	1,27,547.32

SGST Input Not Eligible	1,57,132.16	1,27,547.32
IGST Input Not Eligible	19,900.00	77,672.00
1301 input tiot Engine	62,44,582.33	71,28,494.85
Schedule- 18	1	
Agricultural Expenses		
Consumables	2,757.00	30,402.00
Honorarium	14,400.00	1,10,396.00
Repairs and Maintenance	1,180.00	-
Wages	7,970.00	16,790.00
Nursery plants/seeds	3,330.00	-
	29,637.00	1,57,588.00
Schedule- 19		
Fisheries Expenses		
Consumables	1,922.00	27,609.00
Honorarium	47,547.00	21,350.00
Honorarium & TA Facility	3,000.00	-
Travel & field expense	2,490.00	-
	54,959.00	48,959.00
Schedule- 20		
Mushroom Expenses		
Consumables & Wages	3,90,641.00	5,40,472.00
	3,90,641.00	5,40,472.00
Schedule- 21		
Pottery Expenses		
Consumables	4,825.00	2,007.00
Honorarium	16,000.00	1,62,000.00
	20,825.00	1,64,007.00
Schedule- 22		
SWM IRTC Expenses		
Consumables	-	8,388.00
	-	8,388.00
Schedule- 23		
Project Expenditure		
Alanallur GP-Vellachattapara Small Hydro Proj Expense	26,294.00	-
ANERT -Essay Competition Expense	56,862.00	-

		2018-19
DBT - Foldscope Scheme Expense	6,15,696.00	-
DST-Vigyan Prasar Climate Change & Global Warming Expense	1,09,000.00	-
DST - Vigyan Prasar Sustainable Development Expense	2,18,000.00	-
Elephant Instrusion Detection System Expense	18,759.00	-
ITDP,Attappady-Training Program Expense	6,37,049.00	-
Kerala State Biodiversity Board ,TVM Expense	98,534.00	-
KILA - Impact Assmt -CBPMO Expense	1,95,696.00	-
KILA -Impact Assmt - CFLG Expense	4,09,649.00	-
KSCSTE - National Science Day 2017 Expense	26,251.00	-
KSCSTE - Research Methadology Expense	20,000.00	-
KSCSTE- Tech in Transformg Women's Lives Expense	30,889.00	-
KSCSTE WORLD ENVIRONMENT DAY Expense	15,750.00	-
KSCSTE - World Wetland Day 2018 Expense	26,250.00	-
Nabard - Chaliyar & Urangattiri (DPR) Expense	1,00,014.00	-
NABARD POPI PROJECT Expense	1,89,100.00	-
NABARD - SDP (RSO) Expense	2,42,999.00	-
Ranni Pazhavangadi SWM (DPR) Expense	9,506.00	-
SCERT - Comp Study of Pre Schg System Expense	1,16,246.00	-
Social Justice Dept -Anganwadi Teachers Train Expense	18,21,841.00	-
St. Plg Board - Role MRS Perfororm Nalysis Expense	1,85,900.00	-
Sustainability Plan for NHWDP WSP (NABARD) Expense	3,010.00	-
Swm Training Program Expense	2,08,387.00	-
Thalasseri Municipality - DPR (SWM Proj Expense	21,410.00	-
Theeramythri Project - 2017-2018 Expense	3,88,126.00	-
Theeramythri Project 2018-19 Expense	14,51,885.00	-
WSP - Karuvarakundu GP Expense	2,838.00	-
WSP - Melattoor GP Expense	1,96,096.00	-
WSP - Punnayur Gramapanchayath Expense	5,49,661.00	
WSP - Thirunavaya GP Expense	4,44,101.00	-
KSCSTE - Value Added Products Jackfruit/Mango Expense	1,98,802.00	-
Shornur Municipality - DPR (SWM Proj) Expense	3,494.00	-
WSP - Kozhikode BP Expense	1,65,824.00	-

	91,05,449.00	-
Schedule- 24		
Training Expenditure		
Training Expense - BRC (JAWLA)	-	-
Training Expense - Capacity Building Program	-	-
Training Expense - Coffee Board	-	-
Training Expense - CREST	1,08,220.00	-
Training Expense - CUTEC, Koduvayur	-	-
Training Expense - DBT	-	-
Training Expense - DIET	-	-
Training Expense - Fellowship Artists	3,27,784.00	-
Training Expense - GHSS Vettathur	-	-
Training Expense - Gifted Children Program	-	-
Training Expense - KILA	3,99,129.00	-
Training Expense - KILA (Ardram Mission)	14,94,842.00	-
Training Expense - KSCSTE	-	-
Training Expense - KSGIEU	-	-
Training Expense - Kudumbasree	45,750.00	-
Training Expense - Leadership Training	-	-
Training Expense - MANAGE, Hyderabad	64,660.00	-
Training Expense - Mushroom Cultivation(ATMA)	-	-
Training Expense - RMSA	-	-
Training Expense - Rohtas, Bihar	4,63,188.00	-
Training Expense - SCERT	-	-
Training Expense - SIET	1,08,580.00	-
Training Expense - TDF (NABARD)	-	-
Training Expense - Theeramythri (Capacity Buildg)	38,400.00	-
Training Expense - Theeramythri Proj(Perfo Improv)	2,64,600.00	-
	-	-
	33,15,153.00	-
Schedule- 25		
Annual Maintanence & Consultancy Charges		
Annual Mainte.Charges-Biogasplants at Med.Colle. Kkd	7,88,698.00	-

Annual Mainte. Charges-Biome.Plant&STP Airport Kkd	1,17,190.00	-
Biogas Plant - Airport, Karipur	1,76,135.00	-
Biogas Plant - Medical College,Kozhikode	3,10,000.00	-
Consultancy Charges-Haritha Sahaya Sthapanam (SWM)	-	-
Consultancy Charges -Palakkuzhy Small Hydel Project	6,47,053.00	-
Hall Rent - IRTC Project Implementation Unit	-	-
Hall Rent - SMART, ATDC, TVM	-	-
Holistic Watershed Development Plan- KILA Thaliparambu	-	-
Instal. Port.Biogas Plants & Training Pondicherry	56,235.04	
	20,95,311.04	-
Schedule- 26		
Grant in Aid Expenditure		
KSCSTE- NON PLAN 2018-19	50,25,417.00	
KSCSTE - Plan Grant-in-Aid 2018-19	8,33,000.00	
KSCSTE - Cen .Exce.in Waste Mangmt	25,33,982.00	
	83,92,399.00	-

Fixed Asset Schedule - 4 STATEMENT OF FIXED ASSETS AND DEPRECIATION FOR THE THE YEAR ENDED 31ST MARCH 2019

Particulars	WDV as on	Addi- tions	Additions	Deletions	Balance	Rate	Deprecia- tion	Deprecia- tion	Total Deprecia- tion	WDV as on
	1st Apr 2018	Up to Sep 30th	After Sep 30th	Up to Sep 30th		(%)	(Full Rate)	(Half Rate)		31st March 2019
Tangible Assets										
Air Conditioner	1,31,163.96	1	-	-	1,31,163.96	10%	13,116.40	-	13,116.40	1,18,047.57
Amplifier/Microphone	53,122.80	1	1	1	53,122.80	10%	5,312.28	-	5,312.28	47,810.52
Buildings	239,33,072.63	ı	,	,	239,33,072.63	2%	11,96,653.63	,	11,96,653.63	227,36,419.00
Bicycle	392.33	1	1	1	392.33	15%	58.85	-	58.85	333.48
Biogas Plant-Tech.Demo.Unit	83,555.22	1	1	1	83,555.22	15%	12,533.28	1	12,533.28	71,021.94
Books	19,516.84	-	1	1	19,516.84	10%	1,951.68	-	1,951.68	17,565.16
CCTV	25,653.03	ı	1	1	25,653.03	15%	3,847.95	1	3,847.95	21,805.07
Coin Box	762.55	,	,	1	762.55	10%	76.26	ı	76.26	686.30
Comb Binding Machine	6,815.73	1	1	1	6,815.73	10%	681.57	-	681.57	6,134.16
Computer & Accessories	2,19,832.15	1	1	-	2,19,832.15	40%	87,932.86	-	87,932.86	1,31,899.29
Digital Camera	3,242.64	1	1	-	3,242.64	15%	486.40	-	486.40	2,756.24
Dot Matrix Printer	533.87	1	1	ı	533.87	15%	80.08	1	80.08	453.79
DTH Set	426.73	1	1	ı	426.73	15%	64.01	-	64.01	362.72
Electrical Fittings	2,90,242.20	1,750.00	1	1	2,91,992.20	10%	29,199.22	1	29,199.22	2,62,792.98
Electronic Scale	5,087.50	1	1	ı	5,087.50	15%	763.13	1	763.13	4,324.38
Equipments	28,401.09	4,602.00	1	1	33,003.09	15%	4,950.46	1	4,950.46	28,052.62
Fax Machine	910.35	ı	1	ı	910.35	15%	136.55	1	136.55	773.79
Fridge	326.75	1	-	-	326.75	15%	49.01	-	49.01	277.74
Functioning Generator	-	1	1	1	ı	15%	1	-	-	1
Furniture	13,85,364.41	-	27,200.00	1	14,12,564.41	10%	1,38,536.44	1,360.00	1,39,896.44	12,72,667.97
Kitchen Appliances	2,68,237.89	3,354.00	42,000.00	,	3,13,591.89	10%	27,159.19	2,100.00	29,259.19	2,84,332.70
Lamination Machine	1,110.93	ı	1	ı	1,110.93	15%	166.64	1	166.64	944.29
Laser Printer	1,187.90	1	1	1	1,187.90	15%	178.18	1	178.18	1,009.71
LCD projector	33,741.79	1	-	-	33,741.79	15%	5,061.27	-	5,061.27	28,680.52

MaXX - Jeep	32,422.02	1	1	1	32,422.02	15%	4,863.30	1	4,863.30	27,558.72
Mobile Hand set	344.58	1	1	-	344.58	15%	51.69		51.69	292.89
Monoblock0.5 HP	5,148.39	1	,		5,148.39	15%	772.26		772.26	4,376.13
Paper cutting Machine	231.51	,	,	,	231.51	15%	34.73	,	34.73	196.79
PCO Monitor	2,079.31	1	1	1	2,079.31	15%	311.90	1	311.90	1,767.41
Pottery Wheel/Sprayer	6,712.14	1		-	6,712.14	10%	671.21		671.21	6,040.92
Rubber Roller	2,739.83	1	1	1	2,739.83	15%	410.97	1	410.97	2,328.85
Telephone & Intercom	1,957.67	1	,		1,957.67	15%	293.65		293.65	1,664.02
Vaccum Cleaner	7,503.84	1	1	1	7,503.84	15%	1,125.58		1,125.58	6,378.27
Water Supply & Sanitary Fittings	28,574.27	1	-	-	28,574.27	10%	2,857.43	1	2,857.43	25,716.85
Xerox machine	16,343.92	-	-	-	16,343.92	15%	2,451.59	-	2,451.59	13,892.33
Sanitary Pad Disposer	15,335.23	-	-	-	15,335.23	15%	2,300.28	1	2,300.28	13,034.95
Stiching Machine	1,953.63	,	,		1,953.63	15%	293.05		293.05	1,660.59
Television	27,315.52	1	1	1	27,315.52	15%	4,097.33	ı	4,097.33	23,218.19
Tab	1,29,787.20	-	1	-	1,29,787.20	40%	51,914.88	-	51,914.88	77,872.32
Weed Cutter & Coconut Palm Climber	1,580.26	1	1	-	1,580.26	15%	237.04	ı	237.04	1,343.22
Car -Xylo KL 9 AD 3352	3,31,360.55	1	1	1	3,31,360.55	15%	49,704.08	1	49,704.08	2,81,656.47
Land	80,97,800.00	1	1	_	80,97,800.00	%0	1	ı	-	80,97,800.00
Washing Machine	15,262.50	-	1	1	15,262.50	15%	2,289.38	ı	2,289.38	12,973.13
Weighing Machine	2,745.50	1	1	-	2,745.50	15%	411.83	1	411.83	2,333.68
Wood Cutting Machine	4,798.12	-	-	-	4,798.12	15%	719.72	1	719.72	4,078.40
Solar Water Heater	42,862.22	1	1	1	42,862.22	15%	6,429.33	1	6,429.33	36,432.89
Total	352,67,559.50	9,706.00	69,200.00	1	353,46,465.50		16,61,236.56	3,460.00	16,64,696.56	336,81,768.94
Intangible Assets										
Tally ERP 9 Software	7,025.41	13,334.00	1	1	20,359.41	40%	8,143.77		8,143.77	12,215.65
Total	7,025.41	13,334.00	1	,	20,359.41		8,143.77	,	8,143.77	12,215.65
Grand Total	352,74,584.92	23,040.00	69,200.00	1	353,66,824.92		16,69,380.32	3,460.00	16,72,840.32	336,93,985.00

SOCIETY FOR INTEGRATED RURAL TECHNOLOGY CENTRE Mundur, Palakkad - 678 592		
Receipts and Payments Account for the	year ended 31s	st March 2019
RECEIPTS	SCH. NO.	AMOUNT (Rs.)
Opening Balances		
Cash in Hand		23,950.00
Bank Accounts	1	120,49,762.41
Contingency Reserve Fund Contribution		1,08,001.00
Current Liabilities	2	3,49,938.00
Duties & Taxes Collected	3	9,25,812.00
Biogas Plants Receipts	4	18,75,551.00
Watershed Projects Receipts	5	17,57,445.00
Training Fee Receipts	6	73,46,217.00
Project Receipts (others)	7	85,61,178.00
Grant in Aid Received	8	123,00,711.00
Advance amount Refunded	9	6,04,940.00
Receipt from Debtors	10	21,54,564.95
Indirect Income Received	11	17,82,100.78
Total		498,40,171.14
PAYMENTS	SCH. NO.	AMOUNT (Rs.)
Fixed Assets Purchased	12	92,240.00
Current Liabilities Paid	13	65,39,669.00
Duties & Taxes Paid	14	29,10,913.32
Biogas Plant Payments	15	13,11,235.00
Watershed Projects	16	21,53,578.00
Training Payments	17	16,60,113.00
Project Payments (others)	18	117,00,491.00
Payments out of Grant in Aid	19	79,33,061.28
Loans & Advances Paid	20	12,49,505.00
Indirect Expenses	21	55,15,219.26
Closing Balances:		

Bank Accounts	22	87,16,021.28
Total		498,40,171.14

REGISTRAR

DIRECTOR

SCHEDULE FORMING PART OF RECEIPTS & PAYMENTS ACCOUNT	
	31-03-2019
	Amount (Rs.)
Schedule 1	
Bank Accounts (Opening Balance)	
Canara Bank A/c No : 0773101014773	45,67,022.00
Canara Bank A/c No:0773101015124(ITDP)	1,282.00
PNB-A/c : 4318000100074822 (KILA DII)	2,49,086.65
PNB A/c :4318000100085110 (Social Jus.Dept)	14,82,872.24
PNB A/c No:4318000100050549	1,35,050.68
PNB A/c No:4318000100051557 (DDWS)	4,251.89
PNB A/c No:4318000100057223(RSO NABARD)	2,45,230.00
PNB A/c No:4318000100082177(Contingency Res.Fund)	3,46,197.90
PNB FD A/c No:4318000R00000908	5,00,000.00
PNB FD A/c No:4318000R00000917	5,00,000.00
PNB FD A/c No:4318000R00000926	5,00,000.00
SBI A/c No:10590557836	12,946.95
SBT A/c No: 57028786873	15,267.10
SBT A/c No:67324608083 (WADI Project)	7,27,793.40
SBT A/c No:67324608107 (POPI Project)	2,16,627.60
Treasury Savings Bank A/c No:5607(Spl TSB 66)	25,46,134.00
	120,49,762.41

Schedule 2	
Current Liabilities	
C.P.Sasindran,Co-Ordinator, Watershed Project	10,000.00
ESIC Deducted and Payable	17,198.00
Pudur Kurumba Society	23,875.00
Staff Insurance(LIC) - Jeevan Tharang	20,865.00
Digital Studio Work - Friends of KSSP	1,00,000.00
Digital Studio Work - KSSP Kannur	1,00,000.00
Kadappuram Room Rent -Ummer Kutty P .O	15,000.00
Flood Relief Fund	42,350.00
Village Extn Officer, Pothencode GP	20,650.00
	3,49,938.00
Schedule 3	
Duties & Taxes Collected	
CGST 2018 - 19	3,16,307.00
SGST 2018 - 19	3,16,307.00
Professional Tax 2018-2019	4,800.00
TDS Refund AY 2015 - 16	12,652.00
TDS Refund AY 2016-17	2,75,746.00
	9,25,812.00
Schedule 4	
Biogas Plant Receipts	
Biogasplant - Chengamanad GP	31,500.00
Biogasplant - Kadampazhipuram	92,925.00
Biogas Plant - Kadampazhipuram-II	85,575.00
Biogasplant - Keezhuparambu GP	1,47,300.00
Biogas Plant - Kollam Corporation Stage II	3,000.00
Biogas Plant - Airport, Karipur	47,249.00
Biogas Plant - Manjeri Municipality	1,97,245.00
The Principal, Govt .Medical College, Kozhikode	9,00,545.00
Biogas Plant - Medical College, Kozhikode	3,70,212.00
	18,75,551.00

Schedule 5	
Watershed Projects Receipts	
WSP - Karuvarakundu GP	5,00,000.00
WSP KOZHIKODE BP	5,50,000.00
WSP - Melattoor GP	3,39,900.00
WSP - Punnayur Gramapanchayath	54,945.00
WSP - Thirunavaya GP	3,12,600.00
	17,57,445.00
Schedule 6	
Training Fee Receipts	
Kudumbasree - Palakkad	29,350.00
ITDP,Attappady-Training Program	3,06,240.00
Krishi Bhavan, Karimba	4,600.00
SWM TRAINING	2,11,000.00
The Principal, DIET, Palakkad	15,581.00
The Director, KILA	40,45,095.00
Alternative Development Initiatives (ADI)	8,260.00
Ayanam Marketing LTD ,Thrissur	18,880.00
Centre for Green Energy Technology,Pondichery	79,060.00
Co Ordinator, ED Club, GHSS Vettathur	7,375.00
Co Ordinator, Gifted Children Program	4,000.00
CUTEC, Koduvayur	11,000.00
Dt. Mission Co Ordinator, Kudumbasree, Palakkad	61,065.00
Ex. Director, CREST, Kozhikkode	3,48,926.00
Ex.Director, SAF, Aluva	6,17,612.00
Kerala St.Gen.Insu.Employees Union(KSGIEU)	26,550.00
SCERT ,Thiruvananthapuram	42,480.00
The Director, SIET, Thiruvananthapuram	2,97,749.00
Deputy Director of Education, Palakkad	1,38,503.00
Directorate of Culture, Thiruvananthapuram	7,21,934.00
DRDA, Rohtas, Bihar	3,19,746.00
Block Program Officer, BRC, Parali	31,211.00
	73,46,217.00

Schedule 7	
Project Receipts (Others)	
NABARD - Integr. Tribal DevProgram(ITDP)	2,96,168.00
Chittur - Tattamangalam - DPR Prep (SWM Proj)	61,570.00
Clean Chaliyar Project - Nilambur Block Panchayath	3,01,530.00
DST - Vigyan Prasar - Sustainable Development	2,38,000.00
KSCSTE - National Science Day 2017	25,000.00
KSCSTE- Tech Advan in Transformg Women's Lives	30,000.00
KSCSTE - World Wetland Day 2018	25,000.00
NABARD - WADI TDF Project Measurers)	1,50,768.00
NABARD - WADI TDF Proj.(Manag.Fund)	11,043.00
Shornur Municipality - DPR Preparation (SWM Proj)	1,85,733.00
Social Justice Dept -Anganwadi Teachers Training	18,21,841.00
Sustainability Plan for NHWDP Watersheds (NABARD)	30,000.00
Thalasseri Municipality - DPR Preparation (SWM Proj	1,55,438.00
Alanallur GP-Vellachattapara Small Hydro Project	21,186.00
DBT Foldoscope	6,00,000.00
DST-Vigyan Prasar Climate Change & Global Warming	1,19,000.00
Kerala State Biodiversity Board ,TVM	1,90,080.00
KILA - Impact Assmt -Capacity Buildg Muni Officials	2,27,799.00
KILA -Impact Assmt - Child Friendly Local Govern.	3,68,684.00
KSCSTE JACK FRUIT PROCESSING	1,80,000.00
KSCSTE RESEARCH METHADOLOGY WORKSHOP	20,000.00
KSCSTE - World Environment Day 2018	15,000.00
NABARD Chaliyar	30,000.00
NABARD - POPI Proje	1,16,000.00
NABARD - SDP (RSO)	1,88,634.00
National Institute of Agri.Extension Management	63,000.00
Project Co Ordinator, TDF- WADI Project	22,968.00
Ranni Pazhavangadi SWM (DPR)	1,35,700.00
SCERT - Comparitive Study of Pre Schooling System	1,60,000.00
St. Planning Board - Role of MRS Perform. Analysis	3,91,600.00
The Dep.Gen.Manger ,Airport Authority of India	62,474.00
Theeramythri Project - 2017-18	2,88,000.00
Theeramythri Project 2018-19	13,45,422.00

	2016-18
The Secretary, Palakkad Small Hydro Co	6,50,075.00
The Secretary, Thavanoor GP	33,465.00
	85,61,178.00
Schedule 8	
Grant in Aid Received	
KSCSTE NON PLAN GRANT 2018-19	50,00,000.00
KSKSCSTE - Plan Grant-in-Aid Support 2018-19	8,33,000.00
KSCSTE - Centre of Exce.in Waste Managmt (Nonplan)	25,00,000.00
DST - Bio-Tech Kissan	29,99,000.00
DST - Core Support	9,68,711.00
	123,00,711.00
Schedule 9	
Advance amount Refunded	
Advance - A.K.Mathew	27,500.00
Advance - B. Bharathen(Rent Adv - Karimkulam DPR)	10,000.00
Advance - Bindhu T.C	5,000.00
Advance - Chakko .I .A	39,000.00
Advance - Co-Ordinator,TRP Project	10,000.00
Advance - Deependra .S	13,000.00
Advance - Dhanoop Mohan.N	1,80,000.00
Advance - Muhammed Ismail .P. K	23,000.00
Advance - Muralidas. A	73,000.00
Advance - Naveen Babu .T	37,000.00
Advance - Prof B .M .Musthafa	8,390.00
Advance - Rangaswamy	10,000.00
Advance - Sarojini	27,000.00
Advance - Sasidharanpillai .N.K	10,000.00
Advance - Shanish V.N	67,000.00
Advance - Sheeja. P.V	7,000.00
Advance - Shinton	7,950.00
Advance - Sree Sankar, Co Ordinator, Karimkulam GP	43,600.00
Advance - Sudha .P.S	2,000.00
Advance - Yingel Ladies Hostel (WSP, Tripangode)	4,500.00
	6,04,940.00

Schedule 10	
Receipt from Debtors	
ANERT -Essay Competition	66,000.00
BSNL, Palakkad	36,000.00
Elephant Instrusion Detection System	18,759.00
Parishad Production Centre	84,750.00
SMART (ATDC)-TVM	53,886.00
Thaluk Head Quarters Hospital, Ottappalam	1,652.00
Adhithya Birla Fashion & Retail Ltd	826.00
Apparel Training and Design Centre	2,91,133.00
E.K.Foods Pvt.Ltd	826.00
Haritha Minerals & Beverages	826.00
Indian Coffee House, Palakkad	826.00
IRTC Project Implementation Unit	15,68,262.00
JLO ,Coffee Board , PKD	5,800.00
Kendriya Vidyalaya, Ottappalam	1,652.00
Green Leaf Technology, Sreekrishnapuram	1,770.00
KILA, Agali, Attappady	2,891.00
Manaz Enterprises	826.00
Nelliampathy Tea & Produce Co.Ltd	4,720.00
Precot Meridian Ltd	4,958.95
Sangeeth Products, Palakkad	413.00
Secretary, Kavassery Grama Panchayath	1,770.00
Secretary, Malampuzha Grama Panchayath	3,540.00
Surabhi Aqua Minerals (P) Ltd	826.00
Thaluk Head Quarts Hospital, Ottappalam	1,652.00
	21,54,564.95
Schedule 11	
Indirect Income Received	15.00.00
DBT - Foldscope Scheme Income	15,696.00
General - Administration	9,59,622.78
General - Agriculture	1,86,485.00
General - Fisheries	21,995.00
General - Mushroom Unit	5,14,844.00

	2018-18
General - Pottery	45,275.00
General - SWM Unit, IRTC	29,020.00
NABARD POPI PROJECT INCOME	9,163.00
	17,82,100.78
Schedule 12	
Fixed Assets Purchased	
Electrical Fittings	1,750.00
Fire Extinguisher	4,602.00
Furniture	27,200.00
Induction Cooker	2,800.00
Kitchen Appliances	42,554.00
Tally Software - ERP 9	13,334.00
	92,240.00
Schedule 13	
Current Liabilities	
FGD Payable - Krishna.G.Nair	14,751.00
Honorarium Payable - Krishna . G. Nair	45,000.00
Suchithran . P Payable (Impact Analysis)	50,000.00
ESIC Deducted and Payable	2,20,343.00
Honorarium Payable - Dr.M.Balagopalan	70,000.00
Honorarium Payable - Dr.S.Sreekumar	70,000.00
Honorarium Payable - K.K.Janardhanan	1,10,000.00
IRTC Proj Imple Unit Payable (R & D Activities)	1,25,713.00
IRTC Staff Welfare Society	22,89,614.00
PPC - Waste Management Unit	3,57,300.00
Salary/Honorarium Payable - NKS Pillai	60,195.00
Staff Insurance(LIC) - Jeevan Tharang	1,86,003.00
Staff Welfare Fund	4,000.00
Flood Relief Fund	1,27,135.00
Kerala Samsathana Committtee	68,502.00
KSCSTE -Technology Day 2018	2,750.00
Parishad Production Centre	6,42,224.00
Ranjith Karthikeyan Associates	81,000.00
Somtech Computers Payable	270.00

IRTC Project Implementation Unit	20,00,539.00
IRTC - 30th Year Celebrations	14,330.00
	65,39,669.00
Schedule 14	
Duties & Taxes Paid	
TDS Deducted/Payable 2017-18	49,564.00
TDS Deducted & Payable 2018-19	22,425.00
TDS Input 2018 - 19	9,526.00
Professional Tax 2018-2019	93,740.00
CGST 2017-18	2,81,350.50
CGST 2018 - 19	8,46,283.50
COMMON CGST 2018-19	18,171.00
COMMON SGST 2018-19	18,171.00
IGST RCM PAYABLE 2018-19	4,500.00
CGST NOT ELIGIBLE	1,29,483.16
IGST NOT ELIGIBLE	17,352.00
SGST NOT ELIGIBLE	1,29,483.16
SGST 2017-18	2,81,350.50
SGST 2018 - 19	10,09,513.50
	29,10,913.32
Schedule 15	
Biogas Plant Payments	
Biogas Plant - Kollam Corporation Stage II	3,000.00
Biogas Plant - Manjeri Municipality	74,250.00
Biogas Plant - Medical College,Kozhikode Expenses	3,06,900.00
Instal. Port.Biogas Plants & Trg Pondicherry	28,616.00
Annual Mainte.Charges-Biogasplants at Med.Colle.Kkd	7,81,279.00
Annual Mainte. Charges-Biome.Plant&STP Airport Kkd	1,17,190.00
	13,11,235.00
Schedule 16	
Watershed Projects Payments	
WSP - Karuvarakundu GP Exp	2,838.00

	2018-19
WSP - Kozhikode BP EXP	1,65,224.00
WSP - Melattoor GP Exp	1,93,846.00
WSP - Punnayur Gramapanchayath EXP	5,43,951.00
WSP - Thirunavaya GP EXP	4,36,201.00
IWMP -Pampakuda	19,960.00
WSP- Kadappuram Grama Panchayath	2,05,299.00
WSP -Mangalam GP	3,97,087.00
WSP - Thriprangode GP	1,89,172.00
	21,53,578.00
Schedule 17	
Training Payments	
Training - Fellowship Artists	1,29,894.00
Training - KILA	1,41,600.00
Training - KILA (Ardram Mission)	3,16,855.00
Training - Kudumbasree	4,000.00
Training - MANAGE, Hyderabad	39,010.00
Training - Rohtas, Bihar	63,188.00
Training - Theeramythri Proj(Perfo Improv)	1,82,600.00
Swm Training Program	1,39,287.00
ITDP,Attappady-Training Program Expenses	6,34,679.00
SAF - Leadership for Faculty Assistants	9,000.00
	16,60,113.00
Schedule 18	
Projects Payments (Others)	
Chemind Chemicals, Palakkad	1,05,048.00
C.P.Sasindran,Co-Ordinator, Watershed Project	30,000.00
Creatureway, Aliparambu	30,000.00
Energy Efficient Kiln(DST) Payable	6,000.00
Instrumentation, Coimbatore (Nunes Instruments)	2,40,000.00
NABARD - Integr. Tribal DevProgram(ITDP)	2,94,948.00
Prof.K.R.Janardhanan Payable	3,27,000.00
Registration Fee ISC 2019-Surya.S Payable	25,621.00
Salary/Honora. Payable - B.M.Musthafa	50,000.00

FFDA ,Malampuzha	37,622.00
Green Climate Fund(GCF)-Palakkad Gap of Wes.Ghats	5,162.00
Haritha Sahaya Sthapanam	21,104.00
Dr.Seethalakshmi.K.K - Payable (Contingencies)	29,000.00
Kadappuram Room Rent -Ummer Kutty P .O	15,000.00
Melattoor Room Rent Advance	5,000.00
Karumkulam Grama Panchyath ,TVM	3,18,503.00
KSCSTE - Jack Fruit - Value Addn.Project	30,000.00
KSCSTE - Mushroom "BIRD" Training	4,400.00
KSCSTE - National Science Day 2019	4,187.00
KSCSTE - World Wet Land Day 2019	5,437.00
NABARD - WADI TDF Project Measurers)	34,32,791.00
NABARD - WADI TDF Proj.(Manag.Fund)	6,61,757.00
Ozone Day Celebration - 2018	5,517.00
Kerala State Biodiversity Board ,TVM Expenses	86,534.00
KILA - Impact Assmt -CBPMO Expense	1,94,946.00
KSCSTE- Tech in Transformg Women's Lives Expenses	6,139.00
KSCSTE WORLD ENVIRONMENT DAY Expense	472.00
NABARD POPI PROJECT Expenses	1,88,050.00
Theeramythri Project - 2017-2018 Expense	3,85,674.00
Clean Chaliyar Project - Nilambur BP Expenses	6,905.00
DBT - Foldscope Scheme Expensesense	4,28,697.00
KILA -Impact Assmt - CFLG Expense	4,38,278.00
KSCSTE - Research Methadology Expense	11,056.00
KSCSTE - Value Added Products Jackfruit/Mango Expenses	1,51,602.00
Nabard - Chaliyar & Urangattiri (DPR) Expenses	1,84,028.00
NABARD - SDP (RSO) Expenses	2,12,244.00
SCERT - Comp Study of Pre Schg System Expense	1,15,496.00
St. Plg Board - Role MRS Perfororm Nalysis Expenses	1,85,150.00
Theeramythri Project 2018-19 Expenses	13,97,681.00
Alanallur GP-Vellachattapara Small HY Proj Expense	26,294.00
Consultancy Charges -Palakkuzhy Small Hydel Project	6,43,053.00
Thirur Ponnani Puzha - DPR Preparation	13,54,095.00
	117,00,491.00

Schedule 19	2018-18
Payments out of Grant in Aid	10.10.201.00
KSCSTE- NON PLAN 2018-19 Payment	40,48,294.00
KSCSTE - Plan Grant-in-Aid 2018-19 Expense	38,84,767.28
	79,33,061.28
Schedule 20	
Loans & Advances Paid	
Advance - A.K.Mathew	60,000.00
Advance - Bindhu T.C	5,000.00
Advance - Chakko .I .A	39,000.00
Advance - Chandran (Labour)	1,500.00
Advance - Chinnan (Through PPC)	11,000.00
Advance - Co Ordinator, Nabard Wadi Project	50,000.00
Advance - Co-Ordinator, TRP Project	2,000.00
Advance - Deependra .S	32,000.00
Advance - Dhanoop Mohan.N	1,60,000.00
Advance - Geetha (Pottery)	500.00
Advance - K.K.Janardhanan	55,000.00
Advance - Mohammed Ashraf(Rent Adv Thirur Ponnani)	14,000.00
Advance - Muhammed Ismail .P. K	27,000.00
Advance - Muralidas. A	75,000.00
Advance - Naveen Babu .T	41,500.00
Advance - Noorudheen (Room Rent Kadappuram)	15,000.00
Advance - Prof B .M .Musthafa	25,000.00
Advance - Raju. C.K	12,500.00
Advance - Rangaswamy	22,500.00
Advance - Rejish.R (Mural Work)	3,50,000.00
Advance - Rugmini.A.P (Mess)	2,000.00
Advance - Sajitha (Mess)	2,000.00
Advance - Sarojini	2,000.00
Advance - Sasidharanpillai .N.K	49,805.00
Advance - Shanish V.N	70,000.00
Advance - Shantha	3,000.00
Advance - Sheeja. P.V	17,000.00
Advance -Sheeja V .K	10,000.00

Advance - Shinton	22,200.00
Advance - Sree Sankar, Co Ordinator, Karimkulam GP	50,000.00
Advance - Sreesankar(Harithakeralam Mission)	10,000.00
Advance - Sudha .P.S	12,000.00
Advance - Sunitha.P.L	1,000.00
	12,49,505.00
Schedule 21	
Indirect Expenditures	
General - Administration	50,12,757.26
General - Agriculture	27,067.00
General - Fisheries	49,429.00
General - Mushroom Unit	3,53,574.00
General - Pottery	16,825.00
ANERT -Essay Competition Expenses	22,000.00
Elephant Instrusion Detection System Expenses	18,759.00
Ranni Pazhavangadi SWM (DPR) Expense	9,506.00
Shornur Municipality - DPR (SWM Proj) Expenses	1,644.00
Sustainability Plan for NHWDP Wsp (NABARD) Expenses	3,010.00
Thalasseri Municipality - DPR (SWM Proj Expenses	648.00
	55,15,219.26
Schedule 22	
Bank Accounts (Closing Balance)	
Canara Bank A/c No : 0773101014773	12,84,999.00
Canara Bank A/c No:0773101015124(ITDP)	2,502.00
PNB-A/c: 4318000100074822 (KILA DII)	83,621.55
PNB A/c :4318000100085110 (Social Jus.Dept)	38,036.14
PNB A/c No:4318000100050549	1,46,807.58
PNB A/c No:4318000100051557 (DDWS)	4,271.19
PNB A/c No:4318000100057223(RSO NABARD)	2,39,883.00
PNB A/c No:4318000100082177(Contingency Res.Fund)	4,44,619.80
PNB A/c No :4318000100090103 (HSS)	33,111.00
PNB FD A/c No:4318000R00000908	5,00,000.00
PNB FD A/c No:4318000R00000917	5,00,000.00
PNB FD A/c No:4318000R00000926	5,00,000.00

SBI A/c No:10590557836	2,08,991.95
SBI A/c No:38318582589 (Bio Kissan)	29,99,000.00
SBT A/c No: 57028786873	16,59,827.87
SBT A/c No:67324608083 (WADI Project)	5,515.00
SBT A/c No:67324608107 (POPI Project)	6,566.20
Treasury Savings Bank A/c No:5607(Spl TSB 66)	58,269.00
	87,16,021.28



APPENDIX-I VISITS 2018-19

Sl. No.	Name & Address	Total No.
1	Kudumbasree CDS, Balasabha, Kizhakkanchery	61 nos.
2	K.S.S.P Manjeri Mekhala	4 nos.
3	GWLPS Ezhakkad School	50 nos.
4	Kudumbasree Mission,Palakkad	86 nos.
5	Kudumbasree Mission,Palakkad	89 nos.
6	Vinayaka Nagar Residence Association -Women	8 nos.
7	ASAP SDE, Chittur	8 nos.
8	St.Thomas College Thrissur	45 nos.
9	MES Ponnani College	13 nos.
10	N.S.S.Training College, Ottapalam	24 nos.
11	Oruma Charitable Society, Parali	5 nos.
12	Govt.T.T.I.(W) Palakkad, Ambikapuram	50 nos.
13	Alfath English School, Pattambi, Palakkad	40 nos.
14	G.H.S.S. Big Bazar, Palakkad	65 nos.
15	St.Thomas UP School, Thrissur	7 nos.
16	K.P.R.P.H.S.School, Kongad	115 nos.
17	B.E.M.Higher Secondary School, Palakkad	29 nos.
18	G.V.H.S.School, Malampuzha, Palakkad	32 nos.
19	Kudumbasree Mission, Devikulam, Idukki	45 nos.
20	Kudumbasree Mission, Devikulam, Idukki	70 nos.
21	Kudumbasree Mission, Thodupuzha, Idukki	86 nos.
22	Kudumbasree Mission, Adimaly, Idukki	40 nos.
23	Kudumbasree Mission, Nedumkandam, Idukki	45 nos.
24	Kudumbasree Mission, Azhutha Block, Idukki	43 nos.
25	Ahalia Public School, Kozhippara, Palakkad	17 nos.
26	UNICEF Staff	2 nos.
27	Sree Narayana College of Advanced Studies, Alathur	11 nos.
28	SVAUP School, Kulikkiliyad, Cherpulassery	160 nos.
29	G.H.S.S.Marayamangalam	44 nos.
30	GMLP School, Perinthalmanna	143 nos.
31	Mani Saksharta Asmran Vikas	4 nos.
32	Mount Seena Public School, Pathiripala	61 nos.
33	ATMA Wandoor	50 nos.
34	AUP School Velikkad	45 nos.

35	Govt.College Chittur,Palakkad	74 nos.
36	KILA Centre for Good Dovernance, Mannuthy	34 nos.
37	Lakshminarayana Pulappatta Saraswathy Vidhya Mandiram	57 nos.
38	Palakkad Revenue District Science Club Association, Palakkad	25 nos.
39	Alathur ATMA (Farmers)	25 nos.
40	Holy Family College Koduvayoor	92 nos.
41	Govt.H.S.S Vettathur Malappuram	42 os.

APPENDIX - II TRAININGS ORGANISED BY IRTC DURING 2018-19

No.	Name of Training	Agency	Duration	No. of Participants
1	FHC Team Building Training	Ardram Mission & KILA		5210
2	Kudumbasree Training	Kudumbasree, Palakkad		250
3	Jubilee Fellowship Artist Training	Dept.of Culture Govt.of Kerala	4	200
4	Janakeeyasoothranam	KILA	2	380
5	Capacity Building Training for Project Team	Theeramythri	2	250
6	Training	MANAGE, Hydrabad	4	30
7	Training	DIET, Palakkad	2	145
8	Mushroom Cultivation Training	IRTC	2	26
9	Soap Training	IRTC	2	10
10	Ornaments Making Training	IRTC	2	15
11	Solid Waste Management (SWM) Training for Officials& Representative of LSGDs	IRTC	3	240
12	KILA Training		1	568
13	Koduvayoor B.Ed College Training		2	50
14	VWC Training	NABARD, IRTC	2	80
15	ATMA Training		1	337
16	KSSP Workshop/ Training		2	405
17	SCERT		2	55

			2010-13
18	Water Quality Training	2	30
19	Science Research Methodology Workshop	2	50
20	Jwala Theatre Camp – BRC Parali	2	40
21	CREST Training	10	65
22	Gifted Children's Students	1	85
23	Rohtas Biogas Training	20	20
24	GIS Training	2	10
25	KAU (Forestry College)	2	30
26	SIET Training	7	120
27	Aspire	4	30
28	Training for Electrical Engineer	2	24
29	Wetland Day	2	40

APPENDIX - III STUDENT PROJECTS & INTERNSHIPS

Sl. No	Name of Students	College	Qualification	Title of the Project
1	Vivek Asokan	Central University of Karnataka	M.Sc. Geology	Watershed Management Using GIS platform
2	Akhil.V, Megha Unni, Jayasruthi.K	NSS College Otta- palam	B.Sc. Physics	Temperature Controlled Deltier Cooling System
3	Lija Raj	SNDP YSS College, Perinthalmanna		A Study on Sustainability of Village watershed committee and its Impacts
4	Saranya Balakrishnan	SNDP YSS College, Perinthalmanna		A Study on Sustainability of Village watershed committee and its Impacts
5	Aswathi.M	Bharathiar University, Coimbatore		General Studies in Microbial biotechnology
6	Arya.K	Bharathiar University, Coimbatore		General Studies in Microbial biotechnology
7	Anju.K.S	Bharathiar University, Coimbatore		General Studies in Microbial biotechnology
8	P.Lavanya	Bharathiar University, Coimbatore		General Studies in Microbial biotechnology
9	S.Sruthi	Bharathiar University, Coimbatore		General Studies in Microbial biotechnology
10	Reshma Muralidha- ran	Nehru Arts and Science College, Coimbatore		Microbial Biotechnology

		Nehru Arts and		
11	Hanna.C.H	Science College, Coimbatore	Microbial Biotechnology	
12	Archana.C.V	KVM College of Engineering and IT, Cherthala, Alapuzha	Nehru Arts and Science Col Coimbatore	lege,
13	Sarika.J	Sree Narayana Guru College, K.G.Cha- vadi, Coimbatore	Microbial Biotechnology Ge al Studies	ener-
14	Haritha Hareesh	Sree Narayana Guru College, K.G. Cha- vadi, Coimbatore	Microbial Biotechnology	
15	Binitha.P	Sree Narayana Guru College, K.G.Cha- vadi, Coimbatore	Microbial Biotechnology Ge al Studies	ener-
16	Preethi.S.C	Nehru Arts and Science College, Coimbatore	General Study on Micro & b	oio-
17	Keerthy.M.R	Nehru Arts and Science College, Coimbatore	General Study on Micro & b	oio-
18	Aiswarya.C	Nehru Arts and Science College, Coimbatore	General Studies about Micro ology & Biotechnology	obi-
19	Rdhika.R	Nehru Arts and Science College, Coimbatore	General Microbiology & Bio technology)-
20	Reshma Ramesh	Bharathiar University, Coimbatore	General Microbiology & Bio technology)-
21	Mathivathana.P	Nehru Arts and Science College, Coimbatore	General Studies in Microbia biotechnology	ıl
22	Karthik Murali.P	Nehru Arts and Science College, Coimbatore	General Studies in Microbia biotechnology	ıl
23	Fazil.S	Nehru Arts and Science College, Coimbatore	General Studies in Microbia biotechnology	ıl
24	Ahamed Shaheen.U.H	Nehru Arts and Science College, Coimbatore	General Studies in Microbia biotechnology	ıl
25	Akshay.K.C	Nehru Arts and Science College, Coimbatore	General Studies in Microbia biotechnology	ıl
26	Anubhama.V	Nehru Arts and Science College, Coimbatore	General Studies in Microbia biotechnology	ıl
27	Akhil.C	Nehru Arts and Science College, Coimbatore	General Studies in Microbia biotechnology	ıl
28	Sayana.T.S	Mercy College, Palakkad	General Studies in Microbia biotechnology	ıl

				2018-18
29	Chandni Krishnan	Mercy College, Palakkad		General Studies in Microbial biotechnology
30	Aswani.K.M	Mercy College, Palakkad		General Studies in Microbial biotechnology
31	Amrita Menon	Mercy College, Palakkad		General Studies in Microbial biotechnology
32	Divya.R	S.N.College, Alathur		Antibacterial effect of Green tea against oralbacteria
33	Resmi.R	S.N.College, Alathur		Isolation and charactarization of oil degrading bacteria from soil contaminated with engine oil and test their oil degrading efficiency
34	Shijitha.S	S.N.College, Alathur	M.Sc. Zoology	Reuse of Inoculated Bacterial Compost
35	Resmi Prabhakaran	S.N.College, Alathur	M.Sc. Zoology	Isolation,Identification and characterisation of Microbes from caterinc and Compartive study with the effectiveness of biocleaner and chemical
36	Athira.V.M	S.N.College, Alathur	M.Sc.Zoology	Soil Enrichment with (chemical organic) and without fertilizer
37	Maneesha.M	S.N.College, Alathur	M.Sc.Zoology	Extraction of essential oil from Eucalyptus globulur and testing its pesticidal activity and efficacy on pests
38	Anju.A	S.N.College, Alathur	M.Sc. Zoology	Isolation of mycolorien produc- ing as pergillurniger from soil and its application
39	Akhil Mathew Shaji	MES College, Kottay- am		Socio-Economic Conditions of tribals of attappady
	Ashna Benny	MES College, Kottay- am	MSW	Socio-Economic Conditions of tribals of attappady
40	Ratheesh.B	MES College, Kottay- am	MSW	Socio-Economic Conditions of tribals of attappady
41	Sulu Sabu	MES College, Kottay- am	MSW	Socio-Economic Conditions of tribals of attappady
42	Vijay Sankar.P.N	Bharathiar University, Coimbatore		The Study of Physico-chemical parameters of various compost
43	Rajkumar.A	Bharathiar University, Coimbatore		The Study of Physico-chemical parameters of various compost
44	Chaithra.R	Bharathiar University, Coimbatore		The Study of Physico-chemical parameters of various compost
45	B.Swathi	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience
46	S.S.Pooja	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience
47	T.Jeevika	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience
48	A.Akalya	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience

				2018-19
49	S.Ramya	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience
50	R.Kanimozhi	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience
51	J.A.Nila Bharathy	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience
52	S.Kowshika	Gandhigram Rural Institute dindigul	B.Sc. Agricul- ture	Rural Agricultural work experience
53	M.Swathiga	Gandhigram Rural Institute dindigul	B.Sc. Agriculture	Rural Agricultural work experience
54	Sneha.K.Suby	Tata Institute of Social sciences		Micro enter prise and wom- en empowerment- study on kudumbashree units in Akathethara Panchayath
55	Arya.K.U	METS School of engineering mala, Trissur	B.Tech, Bio technology	Internship
56	Joshini.V	AJK College of arts and science, Coim- batore	B.com. CA	
57	Anjana.S	AJK College of arts and science, Coim- batore	B.com. CA	
58	Sruthy.M	AJK College of arts and science, Coim- batore	B.com. CA	
59	Sandhya.M	AJK College of arts and science, Coim- batore	B.com. CA	
60	Athira.S.Nair	AJK College of arts and science, Coim- batore	B.com. CA	
61	Athulya.J	Indira Gandhi College of arts & science , Nellikuzhi		Importance of water quality management and waste water treatment in different aqua culture system
62	Vineetha.C	Indira Gandhi College of arts & science , Nellikuzhi		Grey water treatment and Recycling green age water
63	Niranjan.T	SRM University, Kattankulathur, Kancheepuram, Tamilnadu	B.Tech Chemical	Internship
64	Vinitha.V	Nehru Arts and Science College, Coimbatore	Micro biology	
65	Sooryakanth.B	Dept.of Biology the gandhigram Rural Institute Gandhi- gram		Role of Phyllanthus embiliens wood in water purification
66	Jamsheera.C.T	H.M.College of Science and Technology, Manjeri	M.Sc. Physics	Practical Comparisons and Efficiency Determination of Ultrasonic Cleaning

67	Sumithra.T.P	H.M.College of Science and Technology, Manjeri	M.Sc. Physics	Construction of Solar Cooker by Fresnel Lens and Analysis Its Working
68	Unnimaya.C	Lady Shri Ram College, New Delhi	MSW	Modernized Traditional Oc- cupations empowering Rural Economy and Women
69	Anju.S.Ram	Sree Sankaracha- rya University of Sanskrit	MSW	
70	Anjali.S	Amrita Vishwa Vidyapeetham, Amrita School of Arts and Science Vallikavu	MSW	Karimkulam gramapanchayath master plan preparation
71	Anish K Abraham	Amrita University, Kollam	MSW	
72	Hanith.J	Amrita Vishwa Vidyapeetham Amr- itapuri, Kollam	MSW	
73	Niranjana M Pradeepkumar	Agakhan Academy Mombasa		GIS
74	Shelja.S	MES Kalladi College, Mannarkkad		Extraction and analysis of fuel from waste HDPE plastics by pyrolysis process
75	Anitha.V	MES Kalladi College, Mannarkkad		Photocatalytic Conversion of methane from biogas to methanol
76	Nandhini.B	AJK College Arts and Science, Coimbatore		Organization
77	Mymoona Fathi- ma.A.H	MES College of Engineering, Malap- puram	B.Tech, Civil Engineering	Essential Civil System in Waste Management and Watershed Management
78	Haritha.P.H	WMO Arts and Science College, Wayanad	MSW	Kudumbasree enterprises A case study
79	Krishna Priya.P.C	Holycross Institute of management & Technology, calicut		Tirur-Ponnani Watershed
80	Anju.S.Ram	Sree Sankaracha- rya University of Sanskrit	MSW	Study on socio emotional warning
81	Midhura Rajan	Institute of Manage- ment in Kerala Ka- riavattom Campus, Thiruvananthapuram	MBA	Organisation Study
82	Kalhar Krishnan	Institute of Manage- ment in Kerala Ka- riavattom Campus, Thiruvananthapuram	MBA	Organisation Study
83	Aswanth.M.S	Dept. of Social Work Central University of Karnataka	MSW	TDF WADI, Tirur- Ponnani

	1	T	1	T
84	Parvati.D	Tata Institute of Social sciences, Hydrerabad	B.A Social Science	Menstrual taboos among Adult women with special reference to Kodumbu Grama Panchayath
85	Amrita.V	Tata Institute of Social sciences, Hydrerabad	B.A Social Science	Menstrual taboos among Adult women with special reference to Kodumbu Grama Panchayath
86	Shifa Abdul Muthalif	SAN International College,Coimbatore	M.Sc. Micro biology	Physical, Chemical and Bacteriological Assesment of water sample
87	Manju.M	SAN International College, Coimbatore	M.Sc. Micro biology	Physical, Chemical and Bacteriological Assesment of water sample
88	Ushmitha.U	SAN International College, Coimbatore	M.Sc. Micro biology	Physical, Chemical and Bacteriological Assesment of water sample
89	Nandhini.B	AJK College arts and Science, Coimbatore	B.Com (Professional Accounting)	Organization
90	Anjali.D	SAN International College, Coimbatore	M.Sc. Micro biology	Physical, Chemical and Bacteriological Assesment of water sample
91	Sanath Krishna	Sri Shakthi Institute of Engineering Tech- nology	B.E. Agriculture	

APPENDIX-IV INFRASTRUCTURE FACILITIES

Jubilee Campus			
Land Office campus Residential campus Agricultural land and commercial Plot near NH 213 (Jubilee campus)	Total 4 Ha.		
Old Campus			
Building Office Block Civil Engineering block Chemistry and Environmental laboratory Clays and Ceramic laboratory Electronics laboratory Soap production unit Mushroom production unit Mechanical workshop Aquaculture laboratory Library, Seminar hall, Auditorium Apparel Tailoring Centre Green Technology Centre Vermi and Windrow Composting unit Accommodation facility for 100 persons (Staff quarters, Dormitory and Ladies quarters)	Total built in area 4620m²		
Other facilities Rainwater harvesting tanks (4 Nos)	Total capacity of 4 lakhs liter		
Bore well	1 no.		

APPENDIX - V IRTC GENERAL BODY 2018-2019

- 1. Joona P.S.
- 2. Dr. N. Shaji
- 3. Radhan .K
- 4. Manoj Kumar .V.
- 5. Stalin G.
- 6. Ramesh Kumar .P
- 7. Muraleedharan A. P.
- 8. Vinod .V
- 9. Dr. Midhun .S
- 10. Gopakumar .P
- 11. Muraleedharan .P
- 12. Joji Koottummal
- 13. Riswan .C
- 14. P. Radhakrishnan
- 15. Sadheera Udayakumar
- 16. Jai Sreekumar
- 17. Saji Jackob
- 18. Chinchu .C
- 19. Sreejith C. S.
- 20. V. T. Karthyani
- 21. P. V. Divakaran
- 22. K. Vilasini
- 23. Prof. Balagopal K.
- 24. Suma Vishnudas
- 25. Dr. K. P. Aravindhan
- 26. Dr. B. S. Harikumaran Thambi
- 27. E. Abdul Hameed
- 28. N. Shanthakumari
- 29. E. Vilasini
- 30. K. Manoharan
- 31. K. V. Sabu
- 32. Adv. Raviprakash K.P.
- 33. Nishamol .M

- 34. Thankachan P. A.
- 35. Pushpalatha M. N.
- 36. Janamma. B
- 37. Adhila Kabir
- 38. Joseph P. V.
- 39. Bhai Krishnan
- 40. Anil V. N.
- 41. Lilly Kartha
- 42. Sanu P. S.
- 43. Harikrishnan K. G.
- 44. Santhosh Erath
- 45. T. Gangadharan
- 46. Dr. N.K. Sasidharan Pillai
- 47. K.K. Janardhanan
- 48. T.P. Sreesankar
- 49. T.K. Meerabhai
- 50. Prof. P.K. Ravindran
- 51. K. Rameshkumar
- 52. Dr. Kavumbai Balakrishnan
- 53. Dr. M.P. Parameswaran
- 54. T.K. Devarajan
- 55. V.G. Gopinathan
- 56. P.K. Narayanan
- 57. Prof. V.R. Raghunandanan
- 58. Dr. M. Lalithambika
- 59. Ajith Kumar C.T.
- 60. K.S. Narayanankutty
- 61. Prof. B.M. Musthafa
- 62. Dr. K. Rajesh
- 63. Representatitve of KSCSTE
- 64. Representatity of DST

APPENDIX - VI EXECUTIVE COMMITTEE 2018-2019

T.Gangadharan Geethika, Kanool, Kannur670564 Dr.N.K.Sasidharan Pillai, I Alummoottil, Kalnjoor, Pathanamthitta68964 Erisheries (Rtd.) Director of Fisheries (Rtd.) Registrar plant (Large of IRTC, Sub Regional Employment Officer(Rtd) Registrar ployment Officer(Rtd) Registrar ployment Officer(Rtd) Executive Director, PPC, Retd. Clerk, from Revenue Dept., Kottyam (PPC, Redd. Clerk, from Revenue Dept., K			
Dr.N.K.Sasidharan Pillai, I Alummoottil, Kalnjoor, Pathanamthitta68964 K.K.Janardhanan Kizhakkeyil, Neelambari, Elayur P.O Malappuram673679 T.P. Sreesankar, Sree Nilayam, Thonnallur, Mevallur, Kottayam686609 T.R. Sreesankar, Sree Nilayam, Thonnallur, Mevallur, Kottayam686609 T.K. Meerabhai, Thanal Mathilakam Thrissur-680685 Prof.P.K.Ravindran Soorya, Njanrakkal, Prof.P.K.Ravindran Soorya, Njanrakkal, Cranakulam682505 P.Rameshkumar Pathirippilly house Kadampuzha, Malappuram-676553 Dr.Kavumbai Balakrishnan Swathi, Kalpamandiram lane, Sankarayyar Road, Poothol, Thrissur680004 Dr.M.P.Parameswaran, Arunima, Madangari mana, Poothol, Thrissur680004 T.K.Devarajan Neelambari Azhikkodan Nagar Housing Colony, Ramatheru, Pallikunnu, Kannur67044 V.G.Gopinathan Niranjana, F.C.I, Bilane4, West Chalakkudy, Thrissur680007 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala, Palakkad. Prof.V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesawadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof. B.M. Musthafa, Moochikkad Panayor P.O, Polpully, Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva-	Name Prof.	Designation	EC Responsibility
Kalnjoor, Pathanamthitta68964 K.K. Janardhanan Kizhakkeyil, Neelambari, Elayur PO Malappuram673679 T.P. Sreesankar, Sree Nilayam, Thonnallur, Mevallur, Kottayam686609 T.K. Meerabhai, Elayur PO Malappuram673679 T.F. Sreesankar, Sree Nilayam, Thonnallur, Mevallur, Kottayam686609 T.K. Meerabhai, A.E.O (Rtd.) T.K. Meerabhai, Mathilakam Thrissur-680685 Prof.P.K. Ravindran Soorya, Njanrakkal, Ernakulam682505 P.R. Aleo (Rtd.) P.R. Rawindran Soorya, Njanrakkal, Ernakulam682505 P.R. Aleo (Rtd.) P. Dy. Director College of Education Govt. of Kerala (Rtd.) P. Dy. Director College of Education Govt. of Kerala (Rtd.) P. Aleo (Rtd.) P.		President of KSSP Teacher (Rtd.)	Chairman
bari, Elayur PO Malappuram673679 T.P Sreesankar, Sree Nilayam, Thonnallur, Mevallur, Kottayam686609 T.K Meerabhai, Thanal Mathilakam Thrissur-680685 Prof. P.K. Ravindran Soorya, Njanrakkal, Ernakulam682505 P.Rameshkumar Pathirippilly house Kadampuzha, Malappuram-676553 Dr. Kavumbai Balakrishnan Swathi, Kalpamandiram lane, Sankarayyar Road, Poothol, Thrissur680004 Dr.M.P.Parameswaran, Arunima, Madangarli mana, Poothol, Thrissur680004 T.K. Devarajan Neelambari Azhikodan Nagar Housing Colony, Ramatheru, Palikkunnu, Kannur67004 V.G. Gopinathan Niranjana, E.C. I, Bilane4, West Chalakkudy, Thrissur680005 P.K. Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala, Palakkad. Prof. V.R. Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M. Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T., ANERT, Thrissur E.C. Member Dr.M. Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Project Engineer, ANERT, Thrissur E.C. Member E.		Director of IRTC & Dy. Director of Fisheries (Rtd.)	Director
Mevallur, Kottayam686609 from Revenue Dept., Kottyam PPC T.K Meerabhai, Thanal Mathilakam Thrissur-680685 AEO (Rtd.) Prof.P.K.Ravindran Soorya, Njanrakkal, Ernakulam682505 Dy. Director College of Education Govt. of Kerala (Rtd) P.Rameshkumar Pathirippilly house Kadampuzha, Malappuram-676553 Dr.Kavumbai Balakrishnan Swathi, Kalpamandiram lane, Sankarayyar Road, Poothol, Thrissur680004 Dr.M.P.Parameswaran, Arunima, Madangarli mana, Poothol, Thrissur680004 T.K.Devarajan Neelambari Azhikkodan Nagar Housing Colony, Ramatheru, Pallikkunnu, Kannur67004 V.G.Gopinathan Niranjana, F.C.I,Bilane4, West Chalakkudy, Thrissur6800307 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala,Palakkad. Prof.V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi PO Cherpulassri, Palakkad679504 Prof. B.M.Musthafa, Moochikkad Panayor PO, Polpully, Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva-			Registrar
Thanal Mathilakam Thrissur-680685 Prof.P.K.Ravindran Soorya, Njanrakkal, Ernakulam682505 Prof.P.K.Ravindran Soorya, Njanrakkal, Ernakulam682505 P.Rameshkumar Pathirippilly house Kadampuzha, Malappuram-676553 Dr.Kavumbai Balakrishnan Swathi, Kalpamandiram lane, Sankarayyar Road, Poothol, Thrissur680004 Dr.M.P.Parameswaran, Arunima, Madangarli mana, Poothol, Thrissur680004 T.K.Devarajan Neelambari Azhikkodan Nagar Housing Colony, Ramatheru, Pallikkunnu, Kannur67004 V.G.Gopinathan Niranjana, F.C.I,Bilane4, West Chalakkudy, Thrissur680307 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala,Palakkad. Prof.V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayananakurty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof.B.M.Musthafa, Moochikkad Panayoor P.O, Polpully,Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva-			Executive Director PPC
Ernakulam682505 Govt. of Kerala (Rtd) P.Rameshkumar Pathirippilly house Kadampuzha, Malappuram-676553 Dr.Kavumbai Balakrishnan Swathi, Kalpamandiram lane, Sankarayyar Road, Poothol, Thrissur680004 Dr.M.P.Parameswaran, Arunima, Madangarli mana, Poothol, Thrissur680004 T.K.Devarajan Neelambari Azhikkodan Nagar Housing Colony, Ramatheru, Pallikkunnu, Kannur67004 V.G.Gopinathan Niranjana, F.C.I,Bilane4, West Chalakkudy, Thrissur680307 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala, Palakkad. Prof. V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof. B.M.Musthafa, Moochikkad Panayor P.O, Polpully, Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamkadaru, Thrissur-680613 Representative of KSCSTE, Thiruva-			EC Member
Dr.Kavumbai Balakrishnan Swathi, Kalpamandiram lane, Sankarayyar Road, Poothol, Thrissur680004 Dr.M.P.Parameswaran, Arunima, Madangarli mana, Poothol, Thrissur680004 T.K.Devarajan Neelambari Azhikkodan Nagar Housing Colony, Ramatheru, Pallikunnu, Kannur67004 V.G.Gopinathan Niranjana, F.C.I, Bilane4, West Chalakkudy, Thrissur680307 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala, Palakkad. Prof. V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M. Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayananankurissi PO Cherpulassri, Palakkad679504 Prof. B.M.Musthafa, Moochikkad Panayor P.O, Polpully, Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamka-davu, Thrissur-680613 Representative of KSCSTE, Thiruva-		Dy .Director College of Education Govt. of Kerala (Rtd)	EC Member
Kalpamandiram lane, Sankarayyar Road, Poothol, Thrissur680004 Dr.M.P.Parameswaran, Arunima, Madangarli mana, Poothol, Thrissur680004 T.K.Devarajan Neelambari Azhikkodan Nagar Housing Colony, Ramatheru, Pallikkunnu, Kannur67004 V.G.Gopinathan Niranjana, F.C.I,Bilane4, West Chalakkudy, Thrissur680307 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala,Palakkad. Prof.V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof.B.M.Musthafa, Moochikkad Panayoor P.O, Polpully,Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva- Refresentative of KSCSTE, Thiruva- Refresentative of KSCSTE, Thiruva- Refrata Varma College, Thrissur Nuclear Scientist & Social Activist EC Member Nuclear Scientist & Social Activist EC Member Nuclear Scientist & Social Activist EC Member Head Manager(Rtd.) Indian Overseas Bank EC Member Former Registrar of IRTC & Commercial Tax Inspector EC Member EC Member Bec Member Bec Member EC Member Bec Member EC Member Former Registrar of IRTC & Commercial Tax Inspector EC Member Bec Member		Teacher, GLPS Melmuri, Malappuram	EC Member
garli mana, Poothol, Thrissur680004 T.K.Devarajan Neelambari Azhikkodan Nagar Housing Colony, Ramatheru, Pallikkunnu, Kannur67004 V.G.Gopinathan Niranjana, F.C.I,Bilane4, West Chalakkudy, Thrissur680307 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala,Palakkad. Prof. V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof. B.M.Musthafa, Moochikkad Panayor P.O, Polpully,Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Nanager(Rtd.) Indian Overseas Bank E.C Member Ajithkumar C.T, ANERT, Thrissur Ajithkumar C.T, ANERT, Thrissur E.C Member E.C Member Ajithkumar C.T, ANERT, Thrissur E.C Member E.C Member District Secretary KSSP, Palakkad Clerk. Asst. Labour Office Palakkad Clerk. Asst. Labour Office Palakkad E.C Member Prof. S. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Head, Social Science Division, IRTC E.C Member	Kalpamandiram lane, Sankarayyar Road,		EC Member
Nagar Housing Colony, Ramatheru, Pal- likkunnu, Kannur67004 Manager(Rtd.) Indian Overseas Bank V.G.Gopinathan Niranjana, F.C.I,Bilane4, West Chalakkudy, Thrissur680307 P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala,Palakkad. Prof.V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesav- adasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof.B.M.Musthafa, Moochikkad Panay- oor P.O, Polpully,Chittur 678552 Representative of KSCSTE, Thiruva- Manager(Rtd.) Indian Overseas Bank EC Member Fexofficie		Nuclear Scientist & Social Activist	EC Member
West Chalakkudy, Thrissur680307Health &Family WelfareEC MemberP.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala,Palakkad.Former Registrar of IRTC & Commercial Tax InspectorEC MemberProf. V.R.Raghunandanan Priyadarshini Nagar, Paravattani(PO), Thrissur680005Head ,SWM Division, IRTC Professor Kerala Agriculture, University (Retd)EC MemberDr.M.Lalithambika Haritha Kesavadasapuram Road ThiruvananthapuramSenior Project Fellow, IRTC Deputy Director (Retd.) NIIST (CSIR), ThiruvananthapurEC MemberAjithkumar C.T, ANERT, ThrissurProject Engineer, ANERT, ThrissurEC MemberK.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504District Secretary KSSP, Palakkad Clerk. Asst. Labour Office PalakkadEC MemberProf.B.M.Musthafa, Moochikkad Panayor P.O, Polpully,Chittur 678552Research Cordinator (Retd.) Professor Department of Physics, Govt. College, ChitturEC MemberDr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613Head, Social Science Division, IRTCEC MemberRepresentative of KSCSTE, Thiruva-Exofficion	Nagar Housing Colony, Ramatheru, Pal-	Manager(Rtd.) Indian Overseas Bank	EC Member
Prof. V.R. Raghunandanan Priyadarshini Nagar, Paravattani (PO), Thrissur680005 Dr.M. Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof. B.M. Musthafa, Moochikkad Panayor P.O, Polpully, Chittur 678552 Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva- Cial Tax Inspector Head, SWM Division, IRTC Professor Kerala Agriculture, University (Retd) EC Member			EC Member
Nagar, Paravattani(PO), Thrissur680005 Dr.M.Lalithambika Haritha Kesavadasapuram Road Thiruvananthapuram Senior Project Fellow, IRTC Deputy Director (Retd.) NIIST (CSIR), Thiruvananthapur EC Member Vananthapur	P.K.Narayanan Pathiyilmana, Mezhathoor (PO), Thrithala,Palakkad.		EC Member
Ajithkumar C.T, ANERT, Thrissur Ajithkumar C.T, ANERT, Thrissur K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof.B.M.Musthafa, Moochikkad Panayor P.O, Polpully, Chittur 678552 Director (Řetd.) NIIST (CSIR), Thiruvale EC Member EC Member District Secretary KSSP, Palakkad Clerk. Asst. Labour Office Palakkad Research Cordinator (Retd.) Professor Department of Physics, Govt. College, Chittur Prof. R. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva-			EC Member
K.S. Narayanankutty Kalanthodi house Karumanamkurissi P.O Cherpulassri, Palakkad679504 District Secretary KSSP, Palakkad Clerk. Asst. Labour Office Palakkad Prof.B.M.Musthafa, Moochikkad Panayor P.O, Polpully, Chittur 678552 Research Cordinator (Retd.) Professor, Department of Physics, Govt. College, Chittur Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva- Exofficio		Director (Retd.) NIIST (CSIR), Thiru-	EC Member
Karumanamkurissi P.O Cherpulassri, Palakkad679504 Prof.B.M.Musthafa, Moochikkad Panayor P.O, Polpully, Chittur 678552 District Secretary KSSF, Palakkad Clerk. Asst. Labour Office Palakkad Research Cordinator (Retd.) Professor Department of Physics, Govt. College, Chittur Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613 Representative of KSCSTE, Thiruva- Exofficio	Ajithkumar C.T, ANERT, Thrissur	Project Engineer, ANERT, Thrissur	EC Member
oor P.O, Polpully, Chittur 678552 , Department of Physics, Govt. College, Chittur Dr. K. Rajesh, Kottarath Kandassamkadavu, Thrissur-680613	Karumanamkurissi P.O Cherpulassri,		EC Member
davu, Thrissur-680613 Representative of KSCSTE, Thiruva-		, Department of Physics, Govt. College,	EC Member
		Head, Social Science Division, IRTC	EC Member
rr	Representative of KSCSTE, Thiruva- nanathapuram		Exofficio
Representative of DST, New Delhi Exofficio	Representative of DST, New Delhi		Exofficio

APPENDIX - VII RESEARCH ADVISORY COMMITTEE 2018-19

WASTEMANAGEMENT

- 1. Dr. Ajayakumar Varma
- 2. Dr. Girija
- 3. Dr. Joshi Cheriyan

ENERGY MANAGEMENT

- 4. Dr. R.V.G. Menon
- 5. Dr. K.M. Dharesan Unnithan
- 6. Dr. Harikumar .R

LIVELIHOOD MANAGEMENT

- 7. Dr. K.G.K Warrier
- 8. Dr. Pradeep (TBGRA)
- 9. Dr. Sukumaran (EDI)
- 10. Dr. Sajith Sukumaran
- 11. Sri. Joy Elamon
- 12. Sri. Jose Chathukulam
- 13. Sri. N. Jagajeevan

LAND & WATER MANAGEMENT

- 14. Dr. Terry Machado
- 15. Dr. A.P. Pradeep Kumar
- 16. Dr. N.C. Narayanan (IIT)
- 17. Dr. Harikumar P.S.
- 18. Dr. Raghu (KFRI)
- 19. Dr. Sabu Joseph

AGRICULTURE & ALLIED SECTOR

- 20. Dr. P. Jayaraj (KVK Kannur)
- 21. Dr. P.V. Mohan (Rtd. Vet. Surgeon)
- 22. Sri. George Varghese (Kunnamkulam)
- 23. Dr. P.V. Gee Varghese
- 24. Dr. Leena Kumari
- 25. Dr. Visalachandran

EDUCATION

- 26. Sri. O.M. Sankaran
- 27. Dr. C. Ramakrishnan
- 28. Dr. P.V. Purushothaman
- 29. Sri. Khader (SCERT)

APPENDIX - VIII INTERNAL COMPLAINT COMMITTEE

- 1. Dr. K.K. Seethalakshmi (Presiding Officer)
- 2. DR. K. Rajesh (Member)
- 3. Smt. M. Ramani (Member)
- 4. Smt. Priyamol R. (Member)
- 5. Sri. Sajeevan V. (Member)
- 6. Smt. Vijayan (KSSP, Palakkad) (Member)

APPENDIX - IX ADMINISTRATIVE WING Director : Dr. S. Sreekumar : Janardhanan K.K. Registrar Director of Research : Dr. M. Balagopalan Administrative Officer : M. Ramachandran : M. Ramani Accountant Cashier : M. Deepika Office Assistant : K.M. Sushama Office Assistant : Sajil N.R. Campus Manager : V.C. Selvaraj : C.K. Raju Driver