

**Centre for Advanced Remote Sensing and
Environmental Studies
(CARE)**



Caring the Earth Through Technology

**Centre for Advanced Remote Sensing and
Environmental Studies
Trivandrum**

CENTRE FOR ADVANCED REMOTE SENSING AND ENVIRONMENTAL STUDIES

(CARE)

Centre for Advance Remote Sensing and Environmental Studies (CARE) is a an organization registered under 12th Travancore Cochin literary, scientific and charitable society act 1955 with an aim to develop the life of the people of our country, more particularly the people of the various States and Union territories of India, without considering any caste, creed, community and colour, in the areas of hydrology, agriculture, forestry, health, public utilities, education, transportation, law and order, disaster management, community development etc. and to carry out projects, research, training, conduct awareness programs among the people of the country. This organization was established to serve the society and to work for the welfare and benefit of our country through new technologies.

We have expertise in various fields such as Remote Sensing, GIS, Geology, Geography, and Photogrammetry.

OBJECTIVES OF THE SOCIETY

1. To collect and collate data, to conduct studies, and to co-ordinate promote and guide Research, planning and development activities on land use and environment Management by utilizing optimally the various available techniques.
2. To co-ordinate the work relating to use and development of land and its resources, undertaken by the various Governmental and non-governmental organizations, to provide advice to the user agencies and to disseminate all available information on land, its resources and utilization.
3. To provide training facilities, and to organize seminars, lectures and symposia with a view to create awareness of the application of Remote Sensing Technology and to encourage research studies thereon;
4. To co-operate and collaborate with other State, National and international level institutions in the field of Remote Sensing Technique and its applications to undertake

inventory, evaluation and monitoring of the natural resources of the country and the neighboring States.

5. Build up a firm data base on natural resources and other related information for local and regional level by utilizing the existing data from conventional as well as by other new technological method.
6. Conduct training course to the officers and staff of Government department and other agencies in the application of new techniques in the field of land and Environment management.
7. Establish and maintain a library of books, periodicals and other documents relating to the subjects of interest to the functioning of the Centre.
8. Establish a computer based data storage, processing and retrieval systems in Collaboration with the national Informatics System to meet the data needs of the Planning and decision making agencies speedily.
9. The above mentioned objects are to be carried out with an aim of fulfilling the following for the benefit of the people at large.

OUR THRUST AREAS

- Agriculture/ Forestry
- Urban/ Rural development
- Coastal zone management
- Climatic changes
- Soil/ Land degradation
- Water resource management
- Disaster management
- Geospatial Information System Development
- Web Mapping

We are also providing training with theory and practical classes in following areas

- Digital Image Processing (ERDAS)
- GIS (Arc GIS)
- Photogrammetry (Leica Photogrammetry Suite)

Classes will be handled by experienced Scientist and Professors

SENIOR ADVISORY BOARD

1. Mr. K.V.Ravindran, M.Sc

Former Scientist, Indian Space Research Organization, Regional Remote sensing Centre, Bangalore, Dehradun.

Visiting Faculty/ Special Lectures/ Examiner Ambo University, Peoples Republic of Ethiopia, ICIMOD, Kathmandu, Nepal, Jawaharlal Nehru University, Delhi (School of Environment), Delhi University (Dept. of Geology), Roorkee University (Dept. of Earth Sciences), Lucknow University (Dept. of Geology), HNB Garhwali University(Dept. of Geology), Fisheries College, KAU, Kochi, School of Environmental Sciences, MG University, Kottayam, Dept. of Geography, Kannur University, School of Env. Science, Kannur University

Former Chief Editor of:

Remote Sensing for Natural Resources: A Joint Publ. of ISRS and NNRMS/ISRO., 1997.

Remote Sensing and GIS for Natural Resources Management: A Joint Publ. of ISRS and NNRMS/ISRO, 1998

Former Editor of ISRS Symposia Proceedings Volumes of 1992, 1993, 1994, and 1995

Currently working As Sr. Advisor Centre for Environment and Development, Trivandrum (Geoinformatics)

2. Dr. T.P Sasikumar, M.Sc., M.Phil., PhD, LLB, MBA, MS

Former Deputy Director, Directorate General of Security, Cabinet Secretariat, Government of India, Delhi

Former Scientist, Space Application Centre, Ahmadabad

Former Scientist, Program Planning & Project Management, ISRO-HQ, Bangalore

Former Scientist and Section Head - DAAPS, Organizational Development, Photolab, MI Library & Training, ADRIN, Hyderabad

Former Director, UGC-ASC, Calicut University, Kerala

Part time with CSR Project of SOBHA Developers at Palaghat, Kerala

Chairman - SHIKSHA-IIAASSLL

3. Prof. Pappooty, M.Sc

Director Kerala state Encyclopedia, Govt. of Kerala.

Retired as Head of the Department, Department of Physics, Madappally Govt College, Vatakara.

Former Secretary of Kerala Sastra Sahitya Parishath, Moreover he is a well Known social worker in Kerala who has been publishing lots of books in science and environment.

Award-Kerala Sahithya Academy Award

4. Ms. Sreekumari Devi, MA

Former Additional secretary financial department, Govt secretariat Kerala

Project coordinator Sreechithra Tirunal institute for Medical science (Finance and administration), senior finance officer directorate of agriculture Thiruvananthapuram

5. Dr. Vinod Padmanabhan, MBBS Ortho DNB

Consultant Orthopaedic Surgeon, Sree Sudheendra Medical Mission, Ernakulum.

Member, Indian Orthopaedic Association

Member, Bombay Orthopaedic Society

Member, Indian Arthroplasty Association

Member, Indian Society of Hip and Knee Surgeons

Member, Maharashtra Orthopaedic Association

Member, Orthopaedic Association of South Indian States

Member, Kerala Orthopaedic Association

Member, Cochin Orthopaedic Society.

Member, Trauma Life Support Society of India

TECHNICAL ADVISORS

1. Dr. D Ramesh, MSc, PhD (Geology)

Professor, Environmental Remote Sensing and Cartography Department Madurai Kamaraj University, Madurai.

2. Dr. S Mahendran, MSc, PhD (Geology).

Professor, Department of Civil Engineering, P.S.N.A College of Engineering and Technology, Dindigul

TECHNICAL HEADS

1. Dr. A Muthukrishnan, MSc, PhD

Doctor of Philosophy (Ph.D.) in *Applied Geography with specialization of Coastal Land Management using Geospatial Technology*

- GIS Systems Analyst in CGIT lab Bharathidasan University for Tamil Nadu HADP (Hill Area Development Program of Udhamandalam District) HILLARIS Project: “Stereo plotting using digital aerial photogrammetry (ERDAS 9.1) 3D Photogrammetry software”
- GIS Programmer: in the Tamil Nadu Working Plan Circle, Department of Forests (Out Source Employee)
- Spatial Data Executive: in the Ireland OSI (Ordnance Survey of Ireland) Project: “Stereo plotting using digital aerial photogrammetry (Virtuozo 3.6) 3D software”
- Project Associate: in the Japanese Grant Aid Project “Watershed Level Environmental Assessment of Riparian Forest” (from 4-15, Feb 2001)

2. Mr. Govindaraj, MSc (Applied Geography) M.Phil. (Micro Level Planning)

Project Associate for following Projects in Centre for Geo Information Technologies Lab, School of Geo Science, Department of Geology, Bharathidasan University, Trichy.

- Project entitled “RAMIS” (Rural Area Development Monitoring and Information System) in Pudukkottai District, Tamilnadu using Arc Info and Erdas
- Project Entitled “SCHOOLGIS” (Mapping of Schools for Better School Educational Planning and Management Using GIS and GPS for Tamil Nadu State) Entire Tamilnadu State Arc Info and Leica DGPS
- Project Entitled “HILARIS” (Hill Area Resource Information System Using Geographic Information Technologies - A Spatial Decision Support System to Nilgiri District) using Arc Info9.3, Erdas 9.1, AutoCAD MAP 2000i
- Project Entitled “ELEGIS” (Electioneering through GIS and GPS for Tamil Nadu State)
- Project Entitled 'RAILGIS' (Fixing Alignment of Obulavaripalle-Venkatachalam New BG Line Andhra Pradesh) using AutoCAD 2000i

PROJECT TEAMS

Chief Execution	– Sreekanth P M
HR Manager	- Sinhju Velandy
Project Coordinator	– Bineesh K M
Project Manager	– Regil R
Documentation	– Sreeraj VS

TECHNICAL TEAMS

1. Sreekanth .P.M, MSc, M.Tech

- Former *Photogrammetrist* Centre for Geo Information Technologies Lab, School of Geo science, Department of Geology, Bharathidasan University Trichy.
- *GIS Engineer* M.S. Geodesigns Pvt Ltd, Chennai.

Project Handled:

- Hill Area Resource Information System (HILARIS)
Worked as Photogrammetrist in HILARIS Project for generation of 2 meter contour in Nilgiri District using Cartosat- 1 Stereo Data, Worldview-1 Data and with LPS Software
- Electioneering Through GIS (Election GIS) using Arc Info and Auto CAD MAP 3D
- Property Mapping Project (Consultancy project using Manifold Software)

2. Amaljith.C.K, MSc. M.Tech (Remote Sensing), NSS Volunteer

Academic project: *Estimation of Carbon sequestration potential in Thenmala Forest Division using Remote Sensing and GIS*

Software Known: *Arc GIS 9.2, ENVI 4.5, ERDAS 9.1, DNR GARMIN, QGIS*

3. **Bineesh.K.M**, MSc. M.Tech (Remote Sensing)

Academic project: *Eco Tourism Prioritization in Sulthan Bathery Thaluk, Wayanad Districts, Kerala: Multi Criteria Decision Analysis (MCDA) Approach*

Software Known: *Arc GIS 9.3, ENVI 4.5, ERDAS 9.2, DNR GARMIN, QGIS*

4. **Jithesh.T**, MSc. M.Tech (Remote Sensing), NSS Volunteer, NCC

Academic project: *Drinking Water Supply Management System for Nadapuram Panchayat- Perspective Action Plan for the year 2021 using GeoSpatial Technology*

Software Known: *Arc GIS 9.3, ENVI 4.5, ERDAS 9.2, Water GEMSV8i*

5. **Arun Rajan**, MSc. M.Tech (Remote Sensing)

Academic project: *Identification of Potential Sites for water Harvesting Structures in Bhavani River Basin, Palakkad District, Using RS and GIS*

Software Known: *Arc GIS 9.3, ENVI 4.5, ERDAS 9.2, MapInfo 9, Idrisi*

6. **Regil.R**, MSc. M.Tech (Remote Sensing), MCTS, B.Ed

Academic project: *Land suitability Analysis for sustainable Agriculture in Anjarakandyriver basin, Kannur district, Kerala using Remote Sensing and GIS*

Software Known: *Arc GIS 9.3, ENVI 4.5, ERDAS 9.2, MapInfo 9, QGIS*

7. **Sreeraj.V.S**, MSc. M.Tech (Remote Sensing), NSS Volunteer

Academic project : *Forest Fragmentation and change detection study at Nellyampathy forest range in Western Ghatsof Kerala, using image processing techniques*

Software Known: *Arc GIS 9.3, ENVI 4.5, ERDAS 9.1, MapInfo Pro 10*

8. **Sandeep**, MSc. M.Tech (Remote Sensing), NSS Volunteer

Academic project: *Resource mapping of construction Materials in Kollam Districts*

Software Known: Arc GIS 9.3

9. **Dr. Jaseela Irshad** , B.A.M.S., *NSS Volunteer*

10. **Ms. Bhuvaneshwari**, *MSc (Environmental Studies)*

Formerly worked in Centre for Geo Information Technologies Labs, School of Geo Science Department of Geology, Bharathidasan University Trichy

11. **Mr. Manjush Koshy**, *MSc (Disaster Management), MCA*

MSc Project : Developing a Crisis Information Support System for Coastal Disaster Preparedness and Mitigation using GIS and Remote Sensing.

- Project Fellow in Geomatics Laboratory, Centre for Earth Science Studies (CESS) Government of Kerala, Thiruvananthapuram. (May2008 – 23rdFebruary 2010). 21 Months.
- Technical Assistant in Geomatics Laboratory, Centre for Earth Science Studies (CESS) Government of Kerala, Thiruvananthapuram. (November2007 – May2008) - 7 Months.
- GIS Analyst in Geo Solutions, Thiruvananthapuram, Kerala (17thOctober 2005 to 24th November 2006) 13 Months.
- Auto Desk Certified Auto Cad 2D Diploma from Inter Cad (2007).
- Diploma in Computer Hardware and Network Engineering from Accel IT Academy

EMPLOYES DETAILS

Photogrammetrist

1. **Dr. A Muthu Krishnan** *MSc, PhD*
2. **Mr. Sreekanth P M**, *Msc, MTech*

Digital Image Processing, Remote Sensing

1. **Mr. Govindaraj R** *MSc (Geography), MPhil(Microlevel Planning)*
2. **Mr. Amaljith CK**, *MSc (Physics), M.Tech (Remote Sensing)*

GIS, GPS Technicians

1. **Mr. Bineesh K M** , *MSc (Physics), M.Tech (Remote Sensing)*
2. **Mr. Sreeraj VS**, *MSc (Physics), M.Tech (Remote Sensing)*
3. **Mr.Arun R**, *MSc (Physics), M.Tech (Remote Sensing)*
4. **Mr. Manjush Koshy**, *MSc, MCA*

Environmental Study Specialist

Ms. Bhuvaneswari, *MSc (Environmental Studies)*

Disaster Management and Mitigation

Mr. Manjush Koshy, *MSc (Disaster Management), MCA*

Urban Planning and Management

1. **Dr. D Ramesh** *MSc, PhD (Advisor)*
2. **Mr. Govindaraj R** *MSc (Geography), MPhil(Microlevel Planning)*

Forestry

1. **Dr. D Ramesh** *MSc, PhD (Advisor)*
2. **Dr. A Muthu Krishnan** *MSc, PhD*

HR Management

Mr. Sinhju Velandy, *MBA*

Former Marketing Manager, Suguna Chicken, Kerala Circle

Application Team

1. **Regil R**, MSc, M.Tech, MCTS (*Microsoft Certified Technology Specialist*)
Specialized in VB.NET, C, C++, ASP.NET
Specialized in VB Application Development and Customization
Database: SQL Server, Oracle.
2. **Jithesh T** MSc, M.Tech, ADCST (*Advanced Diploma in Computer Software Technology*)
Specialized in C, C#, VB, VB.NET, HTML
Specialized in Application Development
3. **Anil**, MCA
Languages Handling: C, C++, C#, VB, Ajax

Databases: SQL Server, Oracle, Postgre SQL, Post GIS

Front End: ASP. NET

Survey Advisor

Irshad C, MSc, M.Tech, ITI (Surveyor)
Specialized in *Total Station, Chain Survey, Theodolite, GPS Survey*

Survey Coordinator

Manjush Koshy

GPS : Hand held GPS- Magellan Explorist 600, Garmin

DGPS : Leica 500 series and GNSS 1200.

Total station

Surveyors

1. **Sreejith.K.P** BCom
Specialized in *GPS Survey*
Former GPS Surveyor, Geodesigns Chennai

2. **Linsinju.K**, *Polytechnic Diploma*
3. **Binil.T.V**

Infrastructure of Care

- CARE has fully facilitated Remote Sensing and GIS equipped lab, installed with updated Software for desktop as well as laptops.
- CARE has both high end Linux workstation and windows Operating System

GIS Software Used

- GRASS
- QUANTUM GIS
- Map Window

Digital Image Processing

- Ossim Planet
- Spring 5

Web Mapping

- Sharp Map
- PHP
- MySQL, Postgre SQL, Post GIS

Operating System

- Windows 7 Home premium
- Windows Vista Home Premium
- Linux- Ubuntu

OFFICE

CARE has a well-equipped and fully furnished Remote Sensing and GIS lab.

Our office is near to G.G .Hospital, opposite Kalakoumudi Road, Murinjapalam.

COMPLETED PROJECT

- 1) ***“School Mapping System (SMS) for Attingal Municipality in Trivandrum districts”***:- A web based information System (Pilot work submitted to Govt of Kerala, Ministry of Education)
- 2) ***“Mapping and Estimation of carbon stock in Thenmala Forest Division using Remote Sensing and GIS”*** (Pilot work submitted to Govt. of Kerala, Ministry of Forest)
- 3) ***“Mapping of Un-electrified houses in Ganga Mala colony Trivandrum district”*** (Pilot Project submitted to Planning board, Kerala)

ON GOING PROJECT

- 1) ***“Mapping of Un electrified houses for Peringamala pancahayat, Trivandrum district”***
(Clients: Akshaya&PlanningBoardKerala)

CONTACT ADDRESS

Director

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