

Name Dr. U. Surendran
Date of birth 25.06.1977
Designation Principal Scientist, Division of Remote Sensing application
Qualification M.Sc.(Agri), Ph.D (Soil Science and Agricultural Chemistry)
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Educational Background

- Ph.D in Soil Science and Agricultural Chemistry (SS&AC) during 2005 with OGPA of 9.77/ 10.00 from Tamil Nadu Agricultural University, Coimbatore, India
- Master's degree in SS&AC during 2000 with OGPA of 9.36 / 10.00 from Annamalai University (Gold Medalist)
- ICAR-NET – Twice from Agricultural Scientist Recruitment Board (ASRB)
- Certificate course in Geographic Information System from University of Madras
- Certificate course in Integrated Soil Fertility Management by APRTC, Thailand
- Diploma in Environmental Management by CEDDECT - Spain, Sponsored by ADB.

Professional Experience

2019- 2024, Principal Scientist and Head, CWRDM; 2016-2019, Senior Scientist, CWRDM; 2010- 2016 Scientist, CWRDM; 2006-2010, Scientist, R&D Centre, EID Parry (I) Ltd.; 2005-2006, PDF- Research Associate, Tamil Nadu Agricultural University.

Research Areas

Climate change and its impact on Agriculture, Soil Carbon Assessment and nutrient budgeting, Agricultural water management, Drought management, Use of Advanced technologies (RS, GIS, ML and modelling) in natural resources management, crop simulation modelling.

International Experience

- Awarded an **Indo-Austrian Project** by Department of Science and Technology (DST-TIFAC and **visited International Institute for Applied System Analysis (IIASA) twice** for the period of one month for collaborative research work.
- Awarded **India-Egypt Research** Collaborative Project on Development of Soil and Irrigation Information system funded by Department of Science and Technology (DST), GoI
- Visited Russia for attending a workshop and as part of MoU with **Russian Academy of Sciences (RAS)**
- Involved in Water for Change project funded by DST, GoI under **India-Netherlands** program a joint program of DST and NWO

Awards

- Awarded Gold medal for distinction in post-graduation – M.Sc. (Soil Science)
- Awarded for Best doctoral dissertation in fertilizer usage from Fertilizer Association of India (FAI), New Delhi with a gold medal, Citation and cash prize of Rs. 20,000/-.
- Awarded Senior Research Fellowship (SRF) by Tamil Nadu Agricultural University for pursuing PhD program.
- Awarded NET (National Eligibility Test) twice by Agricultural Scientist Recruitment Board, ICAR, New Delhi.
- Awarded Young Achiever award from SADHNA, Dr.Y.S. Parmar University of Horticultural Sciences, Himachal Pradesh.

Honours/ Recognitions

- Awarded Young scientist project by Department of Science and Technology (DST -SERC-Fast track) with the Budget of Rs. 20.20 Lakhs.
- Member, State Planning Board, for drafting the policy document on Irrigation plan for 13th 5 year Plan, Govt. of Kerala, (Task force Group - Irrigation).
- Focal Group Member – State Action Plan on Climate Change (SAPCC), Government of Kerala.
- Package of strategies to mitigate the negative nutrient balance evolved from doctoral research have been included in the Policy note of Government of Tamil Nadu and implemented in all districts as a pilot scale project.
- Handling Editor in Nature Scientific reports, NPG

- Editorial Board Member in Agricultural Water Management Journal, Elsevier Publishers

Top ten Publications (Based on NAAS Rating-2024)

Sl. No	Significant Publications	Impact factor
1	Surendran, U., Jayakumar, M., Raja, P., Gopinath, G., &Chellam, P. V. (2023).Microplastics in terrestrial ecosystem: Sources and migration in soil environment. Chemosphere , 137946. https://doi.org/10.1016/j.chemosphere.2023.137946	14.80
2	Surendran, U. and MadhavaChandran, K. (2022). Development and evaluation of drip irrigation and fertigation scheduling to improve water productivity and sustainable crop production using HYDRUS, Agricultural Water Management ,269,107668, https://doi.org/10.1016/j.agwat.2022.107668 .	12.70
3	Surendran, U. Raja, P.M Jayakumar and S Rama Subramoniam. 2021. Use of efficient water saving techniques for production of rice in India under climate change scenario: A critical review. Journal of Cleaner Production . https://doi.org/10.1016/j.jclepro.2021.127272 .	17.10
4	Ragaveena, S., Shirly Edward, A. & Surendran, U. 2021. Smart controlled environment agriculture methods: a holistic review. Reviews in Environment Science and Biotechnology https://doi.org/10.1007/s11157-021-09591-z	20.00
5	Surendran, U. , B. Anagha, P. Raja, V. Kumar, K. Rajan and M. Jayakumar. (2019) Analysis of Drought from Humid, Semi-Arid and Arid Regions of India Using DrinC Model with Different Drought Indices. Water Resources Management . https://doi.org/10.1007/s11269-019-2188-5	10.30
6	Surendran, U. , Kumar, V., Ramasubramoniam, S. and Raja, P. 2017. Development of Drought Indices for Semi-Arid Region Using Drought Indices Calculator (DrinC) – A Case Study from Madurai District, a Semi-Arid Region in India. Water Resources Management . DOI 10.1007/s11269-017-1687-5	10.30
7	Surendran, U. , M.Jayakumar and S.Marimuthu. 2016. Low-cost drip irrigation: Impact on sugarcane yield, water and energy saving in semiarid tropical agro ecosystem in India. Science of the Total Environment , 570: 1430-1440	15.80
8	Surendran, U. , Sandeep, O and Joseph E.J. 2016.The impacts of magnetic treatment of irrigation water on plant, water and soil characteristics. Agricultural Water Management 178, 21-29.	12.70
9	Surendran,U. , V. Ramesh, M. Jayakumar, S. Marimuthu, G. Sridevi. 2016 Improved sugarcane productivity with tillage and trash management practices in semi arid tropical agro ecosystem in India. Soil & Tillage Research 158 (2016) 10–21	12.50
10	Surendran, U. , Ramasubramoniam, S., Raja, P., Kumar, V., Murugappan, V., 2016. Budgeting of major nutrients and the mitigation options for nutrient mining in Semi Arid Tropical Agro ecosystem of Tamil Nadu, India using NUTMON model. Environmental Monitoring and Assessment 188 (4), 1-17	9.00

Total Publication

- 1) International - 73
- 2) National - 23

Scopus : <https://www.scopus.com/authid/detail.uri?authorId=16029714600>

Google Scholar: <https://scholar.google.co.in/citations?user=yuml7IYAAAAJ&hl=en&cstart=0&pagesize=20>

Research Gate: <https://www.researchgate.net/profile/Surendran-Udayar-Pillai/research>
