Name Dr. S. Dharumarajan

Date of birth15/06/1981DesignationSenior Scientist

Qualification M.Sc (Ag.), Ph.D (IARI), PDF (Univ. Sydney)

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### **Educational Qualifications**

S.No	Degree	Year	Subject	University/Institution	% of marks
1.	B.Sc (Ag.)	2003	Agriculture	Tamil Nadu Agricultural University	87.7
2.	M.Sc (Ag.)	2006	Soil Science and Agricultural chemistry	,	87.4
3.	Ph.D	2009	Agricultural Chemicals	Indian Agricultural Research Institute	80.6
4	Post Doctorate	2016	Desertification modelling	The University of Sydney, Australia	-

## **Professional Experience**

13 years of experience and expertise in the field of land resource inventorisation, land degradation assessment and digital soil resource mapping

## **Research Areas**

- 1. Application of remote sensing and GIS in Natural Resource management
- 2. Land resource characterisation
- 3. Digital soil mapping and machine learning in soil science
- 4. Desertification/land degradation vulnerability assessment

# **International Experience**

S.No	Country	Place and duration	Purpose
1	Australia	The University of Sydney, Sydney	Post doc programme under Endeavour
		(Mar-Oct 2016)	Research Fellowship
2	France	Le LISAH, (INRA), Montpellier (Oct-Dec 2017)	Digital soil mapping training
3	Chile	The University of Chile, Santiago, Chile (Mar 2019)	Invited speaker in Joint workshop on digital soil mapping and GlobalSoilMap
4	France	Le LISAH, Montpellier (Nov 2019)	Attending annual review meeting of ATCHA project

#### **Awards**

S. No	Name of Award	Awarding Agency	Year
1	IASWC Young Scientist Award	Indian Association of Soil and Water Conservationists, Dehradun	2021
2	ISSLUP Young Scientist award	Indian Society of Soil Survey and Land Use Planning (ISSLUP), Nagpur	2020
3	Outstanding Scientist Award (Foundation day awards)	ICAR- NBSS&LUP Nagpur	2018
4	Endeavour Research fellowship	Department of Education and Training, Govt. of Australia	2016
5	Outstanding Young Scientist Award (Foundation day awards)	ICAR- NBSS&LUP Nagpur	2016
6	Best poster presentation (5 awards)	ISSLUP-2016&2022, ISSS-2015, NCGST-2019	

# Honours/Recognitions

- 1. Invited speaker to present *IndianSoilGrid* project in Joint workshop on digital soil mapping and GlobalSoilMap, Santiago, Chile
- 2. Invited to present research paper in 22<sup>nd</sup> world science Congress, Glasgow during 31/7/22 to 5/8/22
- 3. Expert committee member-Karnataka Atal Bhujal Yojana
- 4. Reviewer in Geoderma, Land degradation and development, Geocarto international. Plos One, Arid land research management

Ten Best Research Papers along with NAAS Rating-2022 SNo Publication		
1.	Lagacherie P, Buis S, Constantin J, <b>Dharumarajan S</b> , Ruiz L and Sekhar M. 2022. Evaluating the impact of using digital soil mapping products as input for spatializing a crop model: The case of drainage and maize yield simulated by STICS in the Berambadi catchment (India). <i>Geoderma</i> , 406:11550 https://doi.org/10.1016/j.geoderma.2021.115503.	12.11
2.	Gomez C, <b>Dharumarajan S,</b> Féret J-B, Lagacherie P, Ruiz L and Sekhar M. 2019. Use of Sentinel-2 Time-Series Images for Classification and Uncertainty Analysis of Inherent Biophysical Property: Case of Soil Texture Mapping. <i>Remote Sensing</i> , 11: 565	10.85
3.	<b>Dharumarajan S*</b> , Bishop TFA, Hegde R and Singh SK. 2018. Desertification vulnerability index—an effective approach to assess desertification processes: A case study in Anantapur District, Andhra Pradesh, India. <i>Land Degradation Development</i> 29: 150-161. https://doi.org/10.1002/ldr.2850.	10.98
4.	<b>Dharumarajan S*</b> , Bishop TFA, Hegde R and Singh SK. 2018. Desertification vulnerability index—an effective approach to assess desertification processes: A case study in Anantapur District, Andhra Pradesh, India. <i>Land Degradation Development</i> 29: 150-161. https://doi.org/10.1002/ldr.2850.	10.98
5.	Lalitha M, <b>Dharumarajan S</b> , Kalaiselvi B, Shivanand K, Koyal A, Kaliraj S and Hegde R. 2021. Hydrochemical characterization and groundwater quality in Cauvery deltaic fluvial plains of SouthernIndia. <i>Environmental Science and Pollution Research</i> , 14:1-6. https://doi.org/10.1007/s11356-021-13467-8.	10.22
6.	Lalitha M, Anil Kumar KS, Nair KM, <b>Dharumarajan S</b> , Koyal A, Shivanand K and Hegde R. 2021. Evaluating pedogenesis and soil Atterberg limits for inducing landslides in the Western Ghats, Idukki District of Kerala, South India. <i>Natural Hazards</i> , 106(1): 487-507. https://doi.org/10.1007/s11069-020-04472-0.	9.10
7.	<b>Dharumarajan S*</b> and Hegde R. 2020. Digital mapping of soil texture classes using Random Forest classification algorithm. <i>Soil Use Management</i> . doi:10.1111/sum.12668	8.95
8.	<b>Dharumarajan S*</b> , Lalitha M, Gomez C, Vasundhara R, Kalaiselvi B and Hegde R. 2021. Prediction of soil hydraulic properties using VIS-NIR spectral data in semi- arid region of Northern Karnataka Plateau. <i>Geoderma Regional</i> https://doi.org/10.1016/j.geodrs.2021.e00475.	8.81
9.	<b>Dharumarajan S*</b> , Hegde R and Lalitha M. 2021. Modelling of soil depth and hydraulic properties at regional level using environmental covariates- A case study in India. <i>Geoderma Regional</i> , 27:e00439. https://doi.org/10.1016/j.geodrs.2021.e00439.	8.81
10.	<b>Dharumarajan S*</b> , Kalaiselvi B, Suputhra A, Lalitha M, Vasundhara R, Anil Kumar KS, Nair KM, Hegde R, Singh SK and Lagacherie P. 2021. Digital soil mapping of soil organic carbon stocks in Western Ghats, South India. <i>Geoderma Regional</i> . https://doi.org/10.1016/j.geodrs.2021.e00387.	8.81

# Total Publications (Peer-reviewed journals only)

International: 26 National: 40

Google Scholar link: <a href="https://scholar.google.co.in/citations?user=zYpMxlQAAAAJ&hl=en">https://scholar.google.co.in/citations?user=zYpMxlQAAAAJ&hl=en</a>

Research Gate link: <a href="https://www.researchgate.net/profile/Dharumarajan-S">https://www.researchgate.net/profile/Dharumarajan-S</a>