Name Dr Rajendra Hegde

**Date of birth** 28-02-1963

**Designation** Principal Scientist and Head(I/C)

**Qualification** M.Sc(Agri), PhD

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### **Educational Qualifications:**

B.Sc(Agri): UAS-Dharwad(1982-86)

M.Sc(Agri) Agronomy): UAS- Dharwad1986-88) PhD(Agronomy): IARI-New Delhi(1988-1991)

## **Professional Experience:**

Working in NBSS&LUP since 2000 on generation of Land Resources Inventory and scientific land use planning. We carried out detailed land resources inventory of a part of Cauvery irrigated command area, Mandya district. Study revealed that continuous growing of high-water intensive crops (rice, sugarcane etc) over a period of 100 years has caused widespread chemical degradation of soils (salinity/alkalinity) in nearly 59% of the command area. Economic loss of Rs 850 crores is taking place in the entire Cauvery command area due to the problem. Served as Lead Scientist (ICAR-NBSSLUP being the lead Knowledge and Technical partner) in the multi-institute collaborative, innovative, science-basedSujala -III project of Watershed Development Department, funded by World Bank. We generated site specific Land Resources Inventory (LRI) and land use plan for 14.5 lakh ha in 12 taluks of 11 districts and Hydrological inventory for 425 sub-watersheds touching the life of nine lakh farmers. Digital library of LRI and Decision Support System (9 modules) were developed and available through web services for all the stakeholders the https://www.sujala3lri.karnataka.gov.in/. Success of the project has led to Karnataka now initiating a World Bank funded multistate project called REWARD (Karnataka, Orissa) on similar lines, with Karnataka as the lead light house state for the project.

#### Research Areas:

Generation of Land resources Inventory and Land use planning, Integrated watershed planning and development.

### **International Experience:**

Participated in one international conference on Natural Resources Management at Malaysia as key note speaker.

#### **Awards**

- SKOCH Order of Merit Award by SKOCH group to Karnataka watershed Development project(Sujala-III)-NBSSLUP was the lead institute, (Dr Rajendra Hegde: Lead Scientist of the project)
- Asia Geo-spatial Excellence Award to Karnataka Watershed Development project-II(Sujala-III) –NBSSLUP was the lead institute(Dr Rajendra Hegde: Lead Scientist of the project)
- Hari Om Ashram Awards: Conferred by Indian Council of Agricultural Research, New Delhi
- ICAR Young Scientist Award : Conferred by Indian Council of Agricultural Research, New Delhi
- Karnataka State Award: conferred by department of youth affairs, Govt. of Karnataka
- Gold Medals 2: Conferred by University of Agricultural Sciences, Dharwad
- Karnataka State Award, conferred by Department of Youth affairs, Govt. of Karnataka

# Honours/Recognitions

- Gold medals (4) conferred by University of Agricultural Sciences, Dharwad
- Best outgoing student award. Conferred by University of Agricultural Sciences, Dharwad
- ICAR Senior Fellowship by Indian Agricultural Research Institute, Pusa, New Delhi.
- ICAR Junior Fellowship (Based on competitive examination) by ICAR New Delhi.
- Govt. of India National Merit Scholarship

SNo.	Publication	NAAS Rating
1.	S. Dharumarajan*, B. Kalaiselvi, Amar Suputhra, M. Lalitha, R. Vasundhara, K.S. Anil Kumar, K.M. Nair, <b>Rajendra Hegde</b> , S.K. Singh and Philippe Lagacherie.2021. Digital soil mapping of soil organic carbon stocks in Western Ghats, SouthIndia. Geoderma-Regional. 25 (2021) e00387	8.81
2.	Rajendra Hegde*, M. B. Mahendra Kumar, K. V. Niranjana, K. V. Seema and B. A. Dhanorkar. Characterization and Classification of Soils of Harve-1 Microwatershed of Chamarajanagar District, Karnataka, India. <i>Current Journal of Applied Science and Technology</i> .39(48): 43-54.	4.71
3	B. Kalaiselvi,*M.Lalitha, S. Dharumarajan, K.S. Anil kumar, R. Srinivasan, <b>Rajendra Hegde</b> , K.V. Niranjana and P. Chandran. 2020. Evidences of sub soil acidity in Tamilnadu uplands and their characterization. <i>Journal of sol salinity and water quality</i> .12(2):155-162	4.94
4	<b>Rajendra Hegde*</b> , K. V. Niranjana, S. Srinivas, B. A. Danorkar and S. K. Singh (2018). Site-Specific Land Resource Inventory for Scientific Planning of Sujala watersheds in Karnataka. <i>Current Science</i> , 115(4),644-652.	7.1
5	<b>Rajendra Hegde*</b> , K.V. Niranjana, A. Natarajan and S.K. Singh 2016. Detailed Land Resources Inventory for Effective Planning of Land Based Rural Development Programs. Special publication of <i>The Geological Society of India</i> . No.5. 2016. pp5.	7.46
6	Rajendra Hegde*, Dhanorkar, B.A., GopaliBardhan, Bhaskar, B.P. and Singh, S.K.2018. Land evaluation for suitability analysis of site-specific pigeon pea ( <i>Cajanus cajana</i> ) – Sorghum (Sorghum bicolor)-A case study of Matki-3 Micro watershed, Gulabarga district, Karnataka, India. <i>International Journal of Agriculture Sciences</i> , 10 (13):6584-6591.	4.58
7	Dharumarajan*, <b>Rajendra Hegde</b> , N. Janani, S.K. Singh. 2019. The need for digital soil mapping in India, <i>Geoderma Regional</i> , 16. <a href="https://doi.org/10.1016/j.geodrs.2019.e00204">https://doi.org/10.1016/j.geodrs.2019.e00204</a>	8.81
8	<b>Rajendra Hegde*</b> , Natarajan A, Meena RS, Niranjana K V, Thayalan S and Singh SK, 2015. Status of soil degradation in an irrigated command area in ChikkarasinakereHobli, Mandya dist. Karnataka, Current Science. 108:1501-1511.	7.1
9	Dharumarajan S, Bishop TFA, <b>Hegde R</b> and Singh SK. 2018. Desertification vulnerability index—an effective approach to assess desertification processes: A case study in Anantapur District, Andhra Pradesh, India. Land Degradation Development 29: 150-161. https://doi.org/10.1002/ldr.2850.	10.98
10	<b>Dharumarajan S</b> , Kalaiselvi B, Lalitha M, Vasundhara R and Hegde R. 2021. Defining fertility management units and land suitability analysis using digital soil mapping approach. <i>Geocarto international</i> , 10:1-21. https://doi.org/10.1080/10106049.2021.1926553.	10.89

Research papers: Total Publications (Peer-reviewed journals only)

International: 14 National: 98

Google Scholar link: <a href="https://scholar.google.com/citations?hl=en&user=3YfYRSYAAAAJ">https://scholar.google.com/citations?hl=en&user=3YfYRSYAAAAJ</a>

Research Gate link: <a href="https://www.researchgate.net/profile/Rajendra-Hegde-2">https://www.researchgate.net/profile/Rajendra-Hegde-2</a>